## SEARCH REQUEST FORM

#### Scientific and Technical Information Center

Scientific and Technical Information Center								
Requester's Full Name: BETELHEN SHEWEGED  Art Unit: 1774 Phone Number 30 2-1529 Serial Number: 10 613, 497  Mail Box and Bldg/Room Location: REM 9D21 Results Format Preferred (circle): PAPER DISK E-MAIL								
If more than one search is submitted, please prioritize searches in order of need.  **********************************								
Include the elected species or structures, keywords, synonyms, acronyms, and registry numbers, and combine with the concept or utility of the invention. Define any terms that may have a special meaning. Give examples or relevant citations, authors, etc, if known. Please attach a copy of the cover sheet, pertinent claims, and abstract.								
Title of Invention: Ink jet	recording max	evals Containing	Siloxane Copolyme	surfactant er				
Title of Invention:	Tienteh	Chen	SCIENTIFIC REFERENCE	<del>BF</del>				
Earliest Priority Filing Date: 0	7/02/2003		APR 8 RECD					
*For Sequence Searches Only* Please includ appropriate serial number.	e all pertinent information (p							
1. Ink jet recor Siloxane copol	rding medium	· containing	a nonionic					
formula rece	eted in c	lam 2.	y waterway					
2. Ink jet reco	•		ing a nonion	i.c				
siloxane cop	olymer su	rfactant 1	having a str	uctural				
formula rece	ited in	claim 3.						
		•						
•			·					
**************************************	**************************************	**************************************	**************************************					
Searcher: Usha	NA Sequence (#)	STN \$ 523.00	• •					
Searcher Phone #:	AA Sequence (#)	,						
Searcher Location:	Structure (#)	Questel/Orbit						
Date Searcher Picked Up: 4 20 05	Bibliographic	Dr.Link						
Date Completed: 4 121 05	Litigation	Lexis/Nexis						
Searcher Prep & Review Time: 120	Fulltext	Sequence Systems						
Clerical Prep Time:	Patent Family	WWW/Internet						

PTO-1590 (8-01)



# STIC Search Report

## STICIDatabase Transition

TO: Betelhem Shewareged

Location: REM 9D21

Art Unit: 1774 10879 4094

**April 21, 2005** 

Case Serial Number: 10/613497

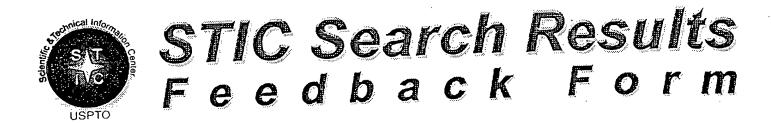
From: Usha Shrestha Location: EIC 1700 REMSEN 4B28

Phone: 571/272-3519

usha.shrestha@uspto.gov

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EIC17000

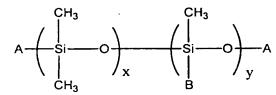
Questions about the scope or the results of the search? Contact the EIC searcher or contact:

Kathleen Fuller, EIC 1700 Team Leader 571/272-2505 REMSEN 4B28

Voluntary Results Feedback Form
<ul> <li>I am an examiner in Workgroup: Example: 1713</li> <li>Relevant prior art found, search results used as follows:</li> </ul>
102 rejection
103 rejection
Cited as being of interest.
Helped examiner better understand the invention.
Helped examiner better understand the state of the art in their technology.
Types of relevant prior art found:
☐ Foreign Patent(s)
<ul> <li>Non-Patent Literature (journal articles, conference proceedings, new product announcements etc.)</li> </ul>
<ul> <li>Relevant prior art not found:</li> <li>Results verified the lack of relevant prior art (helped determine patentability).</li> <li>Results were not useful in determining patentability or understanding the invention.</li> </ul>
Comments:

### **CLAIMS**

- 5 1. A print medium comprising an ink-receiving layer and a coated paperbase, the ink-receiving layer comprising a nonionic siloxane copolymer surfactant.
- 2. The print medium of claim 1, wherein the nonionic siloxane copolymer surfactant comprises the following structure:



wherein A is  $-CH_3$  or B, and B is a  $C_1$  to  $C_{10}$  straight chain or branched primary or secondary hydroxy terminated alkylene group, and x and y are such as to provide a molecular weight greater than about 1000.

3. The print medium of claim 1, wherein the nonionic siloxane copolymer surfactant comprises the following structure:

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wherein m, n, x, and y are such as to provide a molecular weight greater than about 1000, wherein Z is H,  $-CH_3$ , or a  $C_1$  to  $C_{10}$  straight chain or branched primary or secondary hydroxy terminated alkylene group, and wherein the structure contains at least one polyethyleneoxide group.

- 4. The print medium of claim 1, wherein the surface tension of the nonionic siloxane copolymer surfactant is from about 20 dyne/cm to about 35 dyne/cm.
- 5. The print medium of claim 1, wherein the hydrophilic/hydrophobic balance value (HLB) of the nonionic siloxane copolymer surfactant is from about 10 to about 30.
- 15 6. The print medium of claim 1, wherein the weight percent (wt %) of the nonionic siloxane copolymer surfactant is from about 0.05 wt % to about 2 wt %.

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- 7. The print medium of claim 1, wherein the nonionic siloxane copolymer surfactant has a molecular weight of greater than about 1000.
- 8. The print medium of claim 1, wherein the ink-receiving layer further comprises a nonionic or anionic surfactant, wherein the nonionic or anionic surfactant is present in a concentration that is less than the concentration of the nonionic siloxane copolymer surfactant present in the ink-receiving layer.
- 10 9. The print medium of claim 1, wherein the nonionic siloxane copolymer surfactant comprises at least one polysiloxane-polyethylene oxide compound or at least one polysiloxane-polyethylene oxide-polypropylene oxide compound.
  - 10. The print medium of claim 1, wherein the coated paperbase comprises a coated paper, a cast-coated paper, or a commercial offset paper.
    - 11. A method of forming a print medium having improved image quality and permanence, comprising:

providing a coated paperbase; and applying an ink-receiving layer to the coated paperbase, the ink-receiving layer comprising a nonionic siloxane copolymer surfactant.

12. The method of claim 11, wherein applying an ink-receiving layer to
the coated paperbase comprises applying a surfactant having the following structure:

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wherein A is  $-CH_3$  or B, and B is a  $C_1$  to  $C_{10}$  straight chain or branched primary or secondary hydroxy terminated alkylene group, and x and y are such as to provide a molecular weight greater than about 1000.

13. The method of claim 11, wherein applying an ink-receiving layer to the coated paperbase comprises applying a surfactant having the following structure:

$$\begin{array}{c|c} & & & \\ &$$

wherein m, n, x, and y are such as to provide a molecular weight greater than about 1000, wherein Z is H,  $-CH_3$ , or a  $C_1$  to  $C_{10}$  straight chain or branched primary or secondary hydroxy terminated alkylene group, and wherein the structure contains at least one polyethyleneoxide group.

14. The method of claim 11, wherein applying an ink-receiving layer to the coated paperbase comprises applying a nonionic siloxane copolymer surfactant having a molecular weight of greater than about 1000.

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15. The method of claim 11, wherein applying an ink-receiving layer to the coated paperbase comprises applying a nonionic siloxane copolymer surfactant having at least one polysiloxane-polyethylene oxide compound or at least one polysiloxane-polyethylene oxide-polypropylene oxide compound.

16. A method of printing an image having improved image quality and permanence, comprising:

providing a print medium comprising a coated paperbase and an inkreceiving layer present on the coated paperbase, the ink-receiving layer comprising a nonionic siloxane copolymer surfactant; and printing the image on the print medium.

17. The method of claim 16, wherein providing a print medium comprises providing an ink-receiving layer having a surfactant with the following structure:

$$A \xrightarrow{CH_3} O \xrightarrow{X} X \xrightarrow{CH_3} O \xrightarrow{X} Y$$

wherein A is  $-CH_3$  or B, and B is a  $C_1$  to  $C_{10}$  straight chain or branched primary or secondary hydroxy terminated alkylene group, and x and y are such as to provide a molecular weight greater than about 1000.

18. The method of claim 16, wherein providing a print medium comprises providing an ink-receiving layer having a surfactant with the following structure:

wherein m, n, x, and y are such as to provide a molecular weight greater than about 1000, wherein Z is H,  $-CH_3$ , or a  $C_1$  to  $C_{10}$  straight chain or branched primary or secondary hydroxy terminated alkylene group, and wherein the structure contains at least one polyethyleneoxide group.

- 19. The method of claim 16, wherein providing a print medium comprises providing an ink-receiving layer having a nonionic siloxane copolymer surfactant with a molecular weight of greater than about 1000.
- 20. The method of claim 16, wherein providing a print medium comprises providing an ink-receiving layer having at least one polysiloxane-polyethylene oxide compound or at least one polysiloxane-polyethylene oxide-polypropylene oxide compound.

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		9005-66-7/BI OR 9014-85-1/BI)
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L3	1	SEA ABB=ON PLU=ON 9005-64-5/RN
	_	D SCAN
L4	1	SEA ABB=ON PLU=ON 9005-66-7/RN
		D SCAN
L5	2	SEA ABB=ON PLU=ON L2 AND SILWET
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ΠO	. 1	SEA ABB=ON PLU=ON 587848-36-0/RN D SCAN
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L8		STR
L9		STR
L10		SCR 2043
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_ <del>_</del>		D QUE STAT L11
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L14	625	SEA ABB=ON PLU=ON L13(L)TEM?/RL
L15	190	SEA ABB=ON PLU=ON L13 AND PHOTO?/SC,SX
		D FHITSTR
L16		SEA ABB=ON PLU=ON L15 AND INK? (A) JET?
L17	12	SEA ABB=ON PLU=ON L15 AND INK?
		D FHITSTR
L18		SEA ABB=ON PLU=ON L16 OR L17
L19	120594	SEA ABB=ON PLU=ON (POLYSILOXANE? OR SILWET? OR

		SIL	OXANE?)/	IT	
L20	398	SEA	ABB=ON	PLU=ON	L19 AND (DI-ME OR DIMETHYL?) AND
		POL	YETHYLEN	E(A)POLY	PROPYLENE (A) GLYCOL?
L21					L20 AND POLYOXYALKYLEN?
L22					L21 AND PHOTO?/SC
L23	9	SEA	ABB=ON	PLU=ON	L21 AND PHOTO?/SC,SX
L24	14	SEA	ABB=ON	PLU=ON	L21 AND INK?
		D S	CAN TI		
L25	- 5	SEA	ABB=ON	PLU=ON	L21 AND RECORD?
L26	22	SEA	ABB=ON	PLU=ON	L23 OR L24 OR L25
L27	21	SEA	ABB=ON	PLU=ON	L15 AND RECORD?
L28	26	SEA	ABB=ON	PLU=ON	L18 OR L27
L29					L26 OR L28
L30	120466	SEA	ABB=ON	PLU=ON	(POLYSILOXANE? OR SILOXANE?)/IT
L31	398	SEA	ABB=ON	PLU=ON	L30 AND (DI-ME OR DIMETHYL? OR
		DI (A	A) METHYL	) AND	
POLYET	HYLENE (A) 1	POLY	PROPYLEN	E (A) GLYC	OL?
L32	197	SEA	ABB=ON	PLU=ON	L31 AND POLYOXYALKYLEN?
L33	9	SEA	ABB=ON	PLU=ON	L32 AND PHOTO?/SC,SX
L34	5	SEA	ABB=ON	PLU=ON	
L35	12	SEA	ABB=ON	PLU=ON	L33 OR L34
L36	1	SEA	ABB=ON	PLU=ON	L35 AND L1
L37	38	SEA	ABB=ON	PLU=ON	L28 OR L35

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NODE ATTRIBUTES:

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DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED

NUMBER OF NODES IS 4

STEREO ATTRIBUTES: NONE

L8

STR

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NODE ATTRIBUTES:

DEFAULT MLEVEL IS ATOM

DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED

NUMBER OF NODES IS 5

STEREO ATTRIBUTES: NONE

L9 STR

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NODE ATTRIBUTES:

DEFAULT MLEVEL IS ATOM

DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED

NUMBER OF NODES IS 3

STEREO ATTRIBUTES: NONE

L10 SCR 2043

L12 1429 SEA FILE=REGISTRY SSS FUL L7 AND L8 AND L9 AND L10

L13 1218 SEA FILE=HCAPLUS ABB=ON PLU=ON L12

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L37 ANSWER 1 OF 38 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER:

2005:259285 HCAPLUS

DOCUMENT NUMBER:

142:325989

TITLE:

Ink-jet recording
head and ink-jet
recording device

INVENTOR(S):

Kato, Eiichi; Ishizuka, Takahiro Fuji Photo Film Co., Ltd., Japan

SOURCE:

U.S. Pat. Appl. Publ., 50 pp.

CODEN: USXXCO

DOCUMENT TYPE:

Patent English

LANGUAGE:

. 1

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT ASSIGNEE(S):

	PATENT NO.	KIND	DATE	APPLICATION NO.
DATE				
	US 2005062801	A1	20050324	US 2004-946296
2004				
0922				
	JP 2005096214	A2	20050414	JP 2003-332240

0924

PRIORITY APPLN. INFO.:

JP 2003-332240

Α

2003

0924

AB To provide an ink jet recording head
in which a high ink repelling property is kept even
against the repeated use and which is excellent in film strength
and abrasion resistance and is excellent with respect to printing
quality of the resulting image, the ink-jet
recording head comprises a nozzle having: a hole for
discharging a recording liquid including an ink;
and a portion capable of repelling the ink at the
periphery of the hole, wherein the portion comprises a cured film
formed from a composition comprising a block copolymer, and the
block

copolymer comprises: a block polymer comprising a fluorine-containing

polymer; and a block polymer comprising a repeating unit having a siloxane structure.

IT 848229-99-2DP, trimethylsilyl ether 848366-82-5P

(assumed monomers; ink-jet printer head

with good abrasion resistance and ink repelling)

RN 848229-99-2 HCAPLUS

CN INDEX NAME NOT YET ASSIGNED

CM 1

CRN 847200-62-8

CMF (C2 H6 O Si)n C10 H24 O3 Si2

CCI PMS

$$Me$$
  $Me$   $Me$   $Me$   $Me$   $Mo_2C-(CH_2)_4-Si$   $O-Si$   $O-SiMe_3$   $Me$   $Me$   $Me$ 

CM 2

CRN 848229-98-1

CMF (C7 H9 F3 O2 . C6 F10 O)x

CCI PMS

CM 3

CRN 674308-49-7 CMF C7 H9 F3 O2

$$\overset{\mathsf{O}}{\overset{\mathsf{CF}_2}{\longleftarrow}}_{\mathsf{CH}_2-\,\mathsf{O}-\,\mathsf{CH}_2-\,\mathsf{CH}_2-\,\mathsf{C}-\,\mathsf{F}}^{\mathsf{CF}_2}$$

CM 4

CRN 69818-05-9 CMF C6 F10 O

RN 848366-82-5 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 3-(nonamethyltetrasiloxanyl)propyl ester, polymer with 1,1,2,3,3,4,4,4-octafluoro-1-butene, oxiranylmethyl 2-methyl-2-propenoate and

1,1,1,2,2,3,3,4,4,5,5,6,6tridecafluoro-8-[(trifluoroethenyl)oxy]octane, graft (9CI) (CA INDEX NAME)

CM 1

CRN 667457-03-6 CMF C10 H4 F16 O

CM 2

CRN 77865-90-8 CMF C16 H38 O5 Si4

CM 3

CRN 357-26-6 CMF C4 F8

CM 4

CRN 106-91-2 CMF C7 H10 O3

$$\begin{tabular}{c|c} O & CH_2 \\ \hline & & || & || \\ CH_2-O-C-C-Me \\ \hline \end{tabular}$$

IT **847200-61-7DP**, reaction products with graft fluoropolymer (ink-jet printer head with good abrasion

resistance and ink repelling)

RN 847200-61-7 HCAPLUS

CN Poly[oxy(dimethylsilylene)], α-[dimethyl[3-(2oxiranylethoxy)propyl]silyl]-ω-[(trimethylsilyl)oxy]- (9CI)
 (CA INDEX NAME)

IT 658079-18-6P

(repellent liner; ink-jet printer head with
good abrasion resistance and ink repelling)

RN 658079-18-6 HCAPLUS

CN Oxirane, [[(2,3,3-trifluoro-2-propenyl)oxy]methyl]-, polymer with 1,1,2,3,3,4,4,4-octafluoro-1-butene, ester  $\alpha$ -[(10-carboxydecyl)dimethylsilyl]- $\omega$ -[(trimethylsilyl)oxy]poly[oxy(dimethylsilylene)], graft (9CI) (CA INDEX NAME)

CM 1

CRN 188921-66-6 CMF (C2 H6 O Si)n C16 H36 O3 Si2 CCI PMS

$$Me$$
 $Me$ 
 $Me$ 
 $HO_2C-(CH_2)_{10}-Si$ 
 $O-Si$ 
 $n$ 
 $Me$ 
 $n$ 
 $Me$ 
 $Me$ 
 $Me$ 
 $Me$ 
 $Me$ 

CM 2

CRN 658079-17-5

CMF (C6 H7 F3 O2 . C4 F8) $\times$ 

CCI PMS

CM 3

CRN 658074-78-3

CMF C6 H7 F3 O2

CM 4

CRN 357-26-6 CMF C4 F8

IC ICM B41J002-015

NCL 347045000

CC 74-6 (Radiation Chemistry, **Photochemistry**, and **Photographic** and Other Reprographic Processes) Section cross-reference(s): 38, 42

ST fluoropolymer siloxane block copolymer ink repelling head printer; jet printer head ink repelling coating

IT Polysiloxanes, preparation

(fluorine-containing, graft block; ink-jet printer head with good abrasion resistance and ink repelling)

IT Ink-jet printers

(ink-jet printer head with good abrasion resistance and ink repelling)

IT Coating materials

(linings; ink-jet printer head with good abrasion resistance and ink repelling)

IT Fluoropolymers, preparation

(polysiloxane-, graft block; ink-jet
printer head with good abrasion resistance and ink
repelling)

IT 848229-93-6DP, reaction products with glycidyl-containing
 polysiloxanes 848229-97-0DP, trimethylsilyl ether
848229-99-2DP, trimethylsilyl ether 848230-00-2DP,
 trimethylsilyl ether 848230-13-7P 848230-15-9P 848230-16-0P
848230-18-2P 848230-19-3P 848366-81-4P 848366-82-5P
 (assumed monomers; ink-jet printer head

with good abrasion resistance and ink repelling) 29570-58-9DP, Dipentaerythritol hexaacrylate, crosslinked IT products with block graft fluoropolymer-polysiloxanes 60506-81-2DP, Dipentaerythritol pentaacrylate, crosslinked products with block graft fluoropolymer-polysiloxanes 848366-83-6P (ink-jet printer head with good abrasion resistance and **ink** repelling) IT 106-91-2DP, Glycidyl methacrylate, reaction products with carboxyphenylmethyl-terminated fluoropolymer, graft copolymer with functional siloxane 868-77-9DP, 2-Hydroxyethyl methacrylate, graft copolymer with fluoro macromer and functional siloxane 30674-80-7DP, 2-(Methacryloyloxy)ethyl isocyanate, reaction products with carboxy-terminated fluoropolymer, block graft 111481-56-2DP, graft copolymer with functional siloxanes copolymer with fluoropolymer and methacrylate ester 667457-02-5DP, carboxy-terminated, reaction products with 2-(methacryloyloxy)ethyl isocyanate, graft copolymer with functional siloxanes 667457-04-7DP, carboxyphenylmethylterminated, reaction products with glycidyl methacrylate, graft copolymer with functional siloxane and methacrylate 847200-61-7DP, reaction products with graft fluoropolymer 848229-95-8DP, graft copolymers with block fluoropolymers 848230-04-6DP, graft copolymer with fluoro macromer and functional siloxane 848230-08-0DP, graft copolymer with fluoro macromer and methacrylate ester (ink-jet printer head with good abrasion resistance and ink repelling) 658079-18-6P IT (repellent liner; ink-jet printer head with good abrasion resistance and ink repelling) L37 ANSWER 2 OF 38 HCAPLUS COPYRIGHT 2005 ACS on STN 2005:238651 HCAPLUS ACCESSION NUMBER: DOCUMENT NUMBER: 142:325972 Thermal donor for high-speed printing TITLE: Foster, David G.; Gray, Maurice L.; Kung, INVENTOR(S): Teh-Ming; York, William M.; Pope, Brian T. PATENT ASSIGNEE(S): Eastman Kodak Company, USA

CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

SOURCE:

U.S. Pat. Appl. Publ., 11 pp.

#### PATENT INFORMATION:

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PATENT NO.
                        KIND
                               DATE
                                           APPLICATION NO.
DATE
     US 2005059550
                        A1
                               20050317
                                          US 2003-667065
2003
0917
  WO 2005032839
                        A1
                               20050414 WO 2004-US28455
2004
0901
        W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ,
            CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG,
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            KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD,
            MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL,
            PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR,
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        RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM,
            ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH,
            CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU,
            MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI,
            CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
PRIORITY APPLN. INFO.:
                                           US 2003-667065
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2003

0917

AB A dye-donor element including a dye-donor layer is described, wherein the dye-donor element includes a stick preventative agent (e.g., polysiloxane). The dye-donor element is capable of printing an image on a receiver element at a line speed of 2 ms/line or less while maintaining a print d. of at least two, and a print to fail value of at least four. A print assembly including the dye-donor element and a receiver element is also described, as well as a method of printing using the dye-donor element.

IC ICM B41M005-38

NCL 503227000

CC 74-6 (Radiation Chemistry, **Photochemistry**, and **Photographic** and Other Reprographic Processes)

IT Polysiloxanes, uses

(3-aminopropyl Me, di-Me, release

agent; GP 4, GP 6; release agents for use in thermal donor for high-speed printing with reduced sticking complication)

IT Polysiloxanes, uses

(Dow Corning 18, release agent; Dow Corning 11, GP 5, GP 70S, GP 7200, GP 71S; release agents for use in thermal donor for high-speed printing with reduced sticking complication)

IT Polysiloxanes, uses

(Me stearyl, release agent; PS 130; release agents for use in thermal donor for high-speed printing with reduced sticking complication)

IT Polysiloxanes, uses

(amino, GP-RA 156, release agent; GP 4E, GP 50A, GP-RA 157; release agents for use in thermal donor for high-speed

IT Polysiloxanes, uses

(aminoalkyl, release agent; GP 7100; release agents for use in thermal donor for high-speed printing with reduced sticking complication)

IT Polysiloxanes, uses

(di-Me, 3-hydroxypropyl Me, ethers with polyethylene-polypropylene glycol

mono-Me ether, release agent; Silwet L 7001; release agents

for

donor

use in thermal donor for high-speed printing with reduced sticking complication)

IT Polysiloxanes, uses

(di-Me, 3-hydroxypropyl Me, ethoxylated
propoxylated, release agent; release agents for use in thermal
donor for high-speed printing with reduced sticking
complication)

IT Polysiloxanes, uses

(di-Me, 3-hydroxypropyl Me, ethoxylated,
release agent; DBE 224; release agents for use in thermal

for high-speed printing with reduced sticking complication)

IT Polyoxyalkylenes, uses

(di-Me, Me hydrogen polysiloxane

-, release agent; Dow 190; release agents for use in thermal donor for high-speed printing with reduced sticking complication)

IT Polysiloxanes, uses

(di-Me, Me hydrogen,

polyoxyalkylene-, release agent; Dow 190; release
agents for use in thermal donor for high-speed printing with

reduced sticking complication)

IT Polysiloxanes, uses

(di-Me, Me trifluoropropyl,

hydroxy-terminated, release agent, PS 187; release agents for use in thermal donor for high-speed printing with reduced sticking complication)

IT Polysiloxanes, uses

(epoxy, release agent; GP 32, GP 502; release agents for use

in

thermal donor for high-speed printing with reduced sticking complication)

IT Polysiloxanes, uses

(fluorine-containing, release agents; release agents for use

in

thermal donor for high-speed printing with reduced sticking complication)

IT Polysiloxanes, uses

(polyester-, release agent; Byk 371; release agents for use in thermal donor for high-speed printing with reduced sticking complication)

IT Polyesters, uses

(polysiloxane-, release agent; Byk 371; release agents for use in thermal donor for high-speed printing with reduced sticking complication)

IT Epoxy resins, uses

(polysiloxane-, release agent; GP 32, GP 502; release agents for use in thermal donor for high-speed printing with reduced sticking complication)

IT Fluoropolymers, uses

(polysiloxane-, release agents; release agents for use in thermal donor for high-speed printing with reduced sticking complication)

IT 156395-52-7, Dimethylsilanediol-methyl-3,3,3-

trifluoropropylsilanediol copolymer

(assumed monomers; release agent; PS 187; release agents for use in thermal donor for high-speed printing with reduced sticking complication)

L37 ANSWER 3 OF 38 HCAPLUS COPYRIGHT 2005 ACS on STN ACCESSION NUMBER: 2005:33909 HCAPLUS

DOCUMENT NUMBER:

142:123246

TITLE:

Holographic recording material, its manufacture, and recording method

INVENTOR(S):

Sasa, Nobumasa

PATENT ASSIGNEE(S):

Konica Minolta Medical & Graphic, Inc., Japan

SOURCE:

Jpn. Kokai Tokkyo Koho, 24 pp.

CODEN: JKXXAF

DOCUMENT TYPE:

Patent

1

LANGUAGE:

Japanese

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

DATE	PATENT NO.	KIND	DATE	APPLICATION NO.
	JP 2005010187	A2	20050113	JP 2003-170646

2003

0616

PRIORITY APPLN. INFO.:

JP 2003-170646

2003

0616

OTHER SOURCE(S):

MARPAT 142:123246

AB The material contains (A) photo-image forming composition containing a

cationic polymerizable compound and S-containing photo-acid generator

and (B) an inorg. or organic matrix precursor. The material is manufactured by mixing A and B, coating the mixture on a support, and

curing the matrix-forming compds. The material is imagewise irradiated with actinic ray for holog. image formation. The material shows high sensitivity, dimensional stability, and high refractivity contrast.

IT 820232-92-6P

(holog. recording material comprising cationic polymerizable composition and matrix precursor)

RN 820232-92-6 HCAPLUS

CN 7-Oxabicyclo[4.1.0]heptane-3-carboxylic acid, 7oxabicyclo[4.1.0]hept-3-ylmethyl ester, polymer with
1,5-bis[3-[(3-ethyl-3-oxetanyl)methoxy]propyl]-1,1,3,3,5,5hexamethyltrisiloxane (9CI) (CA INDEX NAME)

CM 1

CRN 144993-30-6 CMF C24 H52 O6 Si3

Et 
$$CH_2$$
 $CH_2$ 
 $C$ 

CM 2

CRN 2386-87-0 CMF C14 H20 O4

IC ICM G03H001-02

ICS G03F007-004; G03F007-032

CC 74-8 (Radiation Chemistry, **Photochemistry**, and **Photographic** and Other Reprographic Processes)

ST holog recording material matrix precursor; cationic polymerizable compn sulfur photoacid generator

IT Polysiloxanes, uses

(Me Ph; holog. recording material comprising cationic polymerizable image forming composition and matrix precursor)

IT Polyoxyalkylenes, preparation

(holog. recording material comprising cationic polymerizable composition and matrix precursor)

IT Holographic recording materials

```
(holog. recording material comprising cationic
        polymerizable image forming composition and matrix precursor)
IT
     Polyurethanes, preparation
        (polyoxyalkylene-, matrix; holog. recording material
        comprising cationic polymerizable composition and matrix
precursor)
     5551-72-4, NAI 101 823819-47-2, PI 105
IT
        (holog. recording material comprising cationic
        polymerizable composition and matrix precursor)
     29616-43-1P, Celloxide 3000
                                   120309-91-3P 820232-90-4P
IT
     820232-92-6P
                    820232-93-7P
        (holog. recording material comprising cationic
        polymerizable composition and matrix precursor)
     9005-12-3, Poly[oxy(methylphenylsilylene)] 31230-04-3,
IT
     Poly (Methylphenylsiloxane)
        (holog. recording material comprising cationic
        polymerizable composition and matrix precursor)
IT
     25322-69-4DP, Polypropylene glycol, copolymers with
     diisocyanate-terminated polypropylene glycol
                                                   25322-69-4DP,
     Polypropylene glycol, diisocyanate-terminated, copolymers with
     polypropylene glycol
        (matrix; holog. recording material comprising
        cationic polymerizable composition and matrix precursor)
     104558-95-4, Cyracure UVI 6990
IT
                                    205944-57-6, SP 152
        (photoacid generator; holog. recording material
        comprising cationic polymerizable composition and matrix
precursor)
IT
     820232-94-8
        (sensitizer; holog. recording material comprising
        cationic polymerizable composition and matrix precursor)
L37 ANSWER 4 OF 38 HCAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER:
                         2005:9264 HCAPLUS
DOCUMENT NUMBER:
                         142:103198
TITLE:
                         Inkjet recording materials
                         containing siloxane copolymer surfactants
                         Chen, Tienteh
INVENTOR(S):
PATENT ASSIGNEE(S):
                         Hewlett-Packard Development Company, L.P.,
USA
SOURCE:
                         Eur. Pat. Appl., 11 pp.
                         CODEN: EPXXDW
DOCUMENT TYPE:
                         Patent
                         English
LANGUAGE:
FAMILY ACC. NUM. COUNT:
PATENT INFORMATION:
     PATENT NO.
                         KIND
                                DATE
                                          APPLICATION NO.
```

DATE

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_ _ _ _ _ _ _ _
         EP 1493591
                             A2
                                    20050105 EP 2004-1605
  2004
    0126
                 AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE,
                 MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ,
                 EE, HU, SK
my case
                                    20050106 US 2003-613497
        US 2005003112
                             A1
    2003
    0702
                                    20050127 JP 2004-196255
        JP 2005022415
                           A2
    2004
    0702
                                               US 2003-613497
    PRIORITY APPLN. INFO.:
    2003
    0702
   AB
        A print medium having improved image quality and permanence.
        print medium comprises a coated paper base and an ink-receiving
         layer. The ink-receiving layer comprises a nonionic siloxane
        copolymer surfactant. A method of forming the print medium is
         also disclosed. In addition, a method of printing an image
    having
         improved image quality and permanence is disclosed.
    IC
        ICM B41M005-00
        74-6 (Radiation Chemistry, Photochemistry, and
    CC
        Photographic and Other Reprographic Processes)
        ink jet recording material siloxane copolymer surfactant
    ST
        Alcohols, uses
    IT
            (C11-15-secondary, ethoxylated; ink jet recording
            materials containing siloxane copolymer surfactants)
    IT
        Polyethers, uses
            (di-Me siloxane-; ink jet
            recording materials containing siloxane copolymer
            surfactants)
   IT
        Polysiloxanes, uses
            (di-Me, 3-hydroxypropyl Me, ethers with
           polyethylene glycol mono-Me ether; ink jet recording
```

```
materials containing siloxane copolymer surfactants)
    Polysiloxanes, uses
IT
        (di-Me, 3-hydroxypropyl Me, ethers with
        polyethylene-polypropylene glycol
        mono-Me ether; ink jet recording materials containing
        siloxane copolymer surfactants)
IT
     Polysiloxanes, uses
        (di-Me, 3-hydroxypropyl Me, ethoxylated
        propoxylated; ink jet recording materials containing
        siloxane copolymer surfactants)
IT
     Polyoxyalkylenes, uses
        (di-Me, Me hydrogen polysiloxane
        -; ink jet recording materials containing
        siloxane copolymer surfactants)
IT
     Polysiloxanes, uses
        (di-Me, Me hydrogen,
        polyoxyalkylene-; ink jet recording materials
        containing siloxane copolymer surfactants)
     Polysiloxanes, uses
IT
        (di-Me, hydroxy-terminated, ethoxylated
        propoxylated; ink jet recording materials containing
        siloxane copolymer surfactants)
     Polysiloxanes, uses
IT
        (di-Me, polyether-; ink jet
        recording materials containing siloxane copolymer
        surfactants)
     Ink-jet printing
IT
     Surfactants
        (ink jet recording materials containing siloxane
        copolymer surfactants)
     9002-93-1, Triton X-405 9005-64-5, Tween 20
                                                     9005-66-7, Tween
IT
          9014-85-1, Surfynol 420 51569-39-2, Olin 10G
107397-59-1,
     Tetronic 90R4 110617-70-4, Tetronic 704 441052-10-4, Silwet L
            587848-36-0, Silwet L 7650 691397-13-4, Pluronic L44
        (ink jet recording materials containing siloxane
        copolymer surfactants)
L37 ANSWER 5 OF 38 HCAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER:
                         2004:878586 HCAPLUS
                         141:372733
DOCUMENT NUMBER:
TITLE:
                         Method for use of polymer coated paper or
                         board as reusable printing substrate and
                         printed product
INVENTOR(S):
                         Haakana, Sami Pekka Juhani; Vesanto, Risto
                         Finnish Chemicals Oy, Finland; Stora Enso Oyj
PATENT ASSIGNEE(S):
```

PCT Int. Appl., 16 pp.

SOURCE:

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

1

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

DATE	PATENT NO.	KIND	DATE	APPLICATION NO.
	WO 2004090642	A1	20041021	WO 2004-FI212

2004

0407

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W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ,
        CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG,
        ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP,
        KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD,
        MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL,
        PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR,
        TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
    RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW,
        AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY,
        CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC,
        NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM,
        GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
FI 2003000541
                     Α
                           20041011
                                    FI 2003-541
```

2003

0410

PRIORITY APPLN. INFO.:

FI 2003-541

Α

2003

0410

used

AB The invention relates to a method for using a polymer-coated paper

or board as a printing substrate, to the printed product thus obtained and to the use of the coating. The invention relates to repeated use of the printing substrate, so that the printing ink is removed with a solvent from the surface that has been printed once, and the printing substrate thus cleaned is

for reprint. In accordance with the invention, the printing

surface is formed of polysiloxane, to which polyester or styrene acrylate-based toners attach so as to be irremovable by mech. means, yet removable by washing with a suitable solvent, such as acetone, for instance. A polysiloxane-coated paper or board is suitable especially for electro-photog. print with a dry toner, which

can be fixed to the printing surface by fusion.

IT 778624-42-3P

(use of polymer coated paper or board as reusable printing substrate)

RN 778624-42-3 HCAPLUS

CN Phenol, 4,4'-(1-methylethylidene)bis-, polymer with diethoxymethyl[3-(oxiranylmethoxy)propyl]silane and silica (9CI) (CA INDEX NAME)

CM 1

CRN 7631-86-9 CMF O2 Si

o = si = o

CM 2

CRN 2897-60-1 CMF C11 H24 O4 Si

CM 3

CRN 80-05-7 CMF C15 H16 O2

IC ICM G03G005-00

ICS G03G007-00; B41M005-00; B41M007-00; D21H019-32

CC 74-3 (Radiation Chemistry, **Photochemistry**, and **Photographic** and Other Reprographic Processes)
Section cross-reference(s): 38

IT 778624-40-1P 778624-41-2P **778624-42-3P** 

(use of polymer coated paper or board as reusable printing

substrate)

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE

FOR THIS RECORD. ALL CITATIONS

AVAILABLE

IN THE RE FORMAT

L37 ANSWER 6 OF 38 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER:

2004:857021 HCAPLUS

DOCUMENT NUMBER:

141:358156

TITLE:

Holographic recording medium and

recording method

INVENTOR(S):

Takeyama, Toshihisa

PATENT ASSIGNEE(S):

Japan

SOURCE:

U.S. Pat. Appl. Publ., 23 pp.

CODEN: USXXCO

DOCUMENT TYPE:

Patent

1

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

TMOC

PATENT INFORMATION:

DATE	PATENT NO.	KIND	DATE	APPLICATION NO.
-				
	US 2004202942	A1	20041014	US 2004-815490

2004

0331

PRIORITY APPLN. INFO.: JP 2003-105006

2003

JP 2003-194816 A

2003

0710

OTHER SOURCE(S):

MARPAT 141:358156

AB A holog. recording contains a first substrate and a second substrate having a holog. recording layer between the first substrate and the second substrate, the holog. recording layer containing: (A) a binder compound having a reactive group capable of cationic polymerization; (B) a polymerizable

compound having an ethylenic double bound in the mol.; (C) a photoinitiator; and (D) a crosslinking agent which reacts with the

reactive group in the binder compound, the crosslinking agent being

a thermal cationic polymerization initiator. The feature of the present

invention is to provide holog. **recording** media having a high sensitivity and a low volume decreasing property, and a holog.

recording method employing the media.

IT . 774592-40-4P

(holog. recording medium and recording method)

RN 774592-40-4 HCAPLUS

CN Trisiloxane, 1,5-bis[3-[(3-ethyl-3-oxetanyl)methoxy]propyl]-3,3-bis[[[3-[(3-ethyl-3-oxetanyl)methoxy]propyl]dimethylsilyl]oxy]-1,1,5,5-tetramethyl-, polymer with 2,2'-[[2-ethyl-2-

[(oxiranylmethoxy)methyl]-1,3-propanediyl]bis(oxymethylene)]bis[ox
irane] and 2,2'-[(1-methylethylidene)bis(4,1phenyleneoxymethylene)]bis[oxirane] (9CI) (CA INDEX NAME)

CM 1

CRN 144993-31-7 CMF C44 H92 O12 Si5

CM 2

CRN 3454-29-3 CMF C15 H26 O6

CM 3

CRN 1675-54-3 CMF C21 H24 O4

$$CH_2-O$$
 $Me$ 
 $O$ 
 $CH_2$ 
 $O$ 
 $Me$ 
 $Me$ 
 $Me$ 

IC ICM G03H001-00

NCL 430001000

CC 74-8 (Radiation Chemistry, **Photochemistry**, and **Photographic** and Other Reprographic Processes)
Section cross-reference(s): 38

ST holog recording medium card

IT Holographic recording materials (holog. recording medium and recording method)

IT 26142-30-3, Polypropylene glycol diglycidyl ether (Epolight 200P; holog. recording medium and recording method)

IT 774592-43-7, NK Ester A-CMP 1E
 (NK Ester A-CMP 1E; holog. recording medium and recording method)

IT 64022-15-7, NK Ester A-NP 1E (NK Ester A-NP 1E; holog. recording medium and recording method)

IT 774592-34-6P 774592-35-7P 774592-36-8P 774592-37-9P 774592-38-0P 774592-39-1P **774592-40-4P** 774592-41-5P, 4-Bromostyrene-4-chlorophenyl acrylate copolymer 774592-42-6P, 4-Bromostyrene-New Frontier BR-31 copolymer 774592-44-8P 774592-45-9P 774592-46-0P 774592-47-1P 774592-48-2P (holog. recording medium and recording method)

IT 2039-82-9, 4-Bromostyrene 3047-32-3, 3-Ethyl-3-

```
hydroxymethyloxetane 3454-29-3, Trimethylolpropane triglycidyl
     ether 3897-65-2, 3-Ethyl-3-(phenoxymethyl)oxetane 13633-87-9,
     4-Chlorophenyl acrylate 24293-30-9 25085-99-8, Epo Tohto YD
          32760-80-8 51156-89-9, Tribromophenyl methacrylate
     52794-68-0, Tribromophenyl acrylate 125051-32-3
                                                       125662-54-6
                  134507-97-4
                               134508-03-5
     133152-67-7
                                             134508-05-7
     135842-78-3
                  144993-31-7
                                180423-87-4
                                             186419-14-7
     220666-63-7
                  300822-65-5
                                331623-03-1
                                             773058-26-7
     773058-27-8 774592-32-4 774592-33-5
                                             774594-70-6
        (holog. recording medium and recording
       method)
L37 ANSWER 7 OF 38 HCAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER:
                        2004:824978 HCAPLUS
DOCUMENT NUMBER:
                        141:340478
TITLE:
                        Holographic recording medium and
                        recording method
INVENTOR(S):
                        Takeyama, Toshihisa
PATENT ASSIGNEE(S):
                        Konica Minolta Holdings, Inc., Japan
                        U.S. Pat. Appl. Publ., 21 pp.
SOURCE:
                        CODEN: USXXCO
DOCUMENT TYPE:
                        Patent
LANGUAGE:
                        English
FAMILY ACC. NUM. COUNT:
PATENT INFORMATION:
    PATENT NO.
                        KIND DATE
                                         APPLICATION NO.
DATE
    US 2004197670
                               20041007
                                          US 2004-802143
                         A1
2004
0316
  JP 2004287138
                        A2
                               20041014 JP 2003-79523
2003
0324
    WO 2004086151
                       A1
                              20041007 WO 2004-JP3684
```

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG,

2004

0318

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ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW

RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.:

JP 2003-79523

A
```

0324

OTHER SOURCE(S):

MARPAT 141:340478

GI

Ι

AB A holog. recording medium having high sensitivity comprises a first substrate and a second substrate having a holog.

recording layer between the first substrate and the second
substrate, the holog. recording layer containing: (A) a
binder compound having a reactive group; (B) a polymerizable
compound

having an ethylenic double bond; (C) a photoinitiator; and (D) a crosslinking agent which reacts with the reactive group in the binder compound, wherein the photoinitiator contains a compound represented by formula I (Dye+ = cationic dye; R1-R4 = alkyl, aryl, aralkyl, alkenyl, alkynyl, heterocyclic, cyano; provided that two or more of R1-R4 can form a ring).

IT 771534-35-1P 773091-90-0P 773091-91-1P 773091-92-2P 773091-93-3P 773091-94-4P 773091-95-5P 773091-96-6P 773091-97-7P

773091-98-8P 773092-00-5P 773092-01-6P 773092-02-7P 773092-03-8P

(holog. recording medium and recording method)

RN 771534-35-1 HCAPLUS

Poly[oxy(dimethylsilylene)],  $\alpha$ -[[3-(2-hydroxyethoxy)propyl]dimethylsilyl]- $\omega$ -[[[3-(2-hydroxyethoxy)propyl]dimethylsilyl]oxy]-, polymer with  $\alpha,\alpha$ '-[(1-methylethylidene)di-4,1-phenylene]bis[ $\omega$ -(oxiranylmethoxy)poly[oxy(methyl-1,2-ethanediyl)]] and  $\alpha$ -(1-oxo-2-propenyl)- $\omega$ -(2-naphthalenyloxy)poly(oxy-1,2-ethanediyl) (9CI) (CA INDEX NAME)

CM 1

CN

CRN 286833-74-7

CMF (C2 H4 O)n C13 H10 O2

CCI PMS

$$\begin{array}{c|c}
\hline
 & O \\
\hline
 & CH_2-CH_2-O \\
\hline
 & n \\
\hline
 & C-CH \\
\hline
 & CH_2
\end{array}$$

CM 2

CRN 156327-07-0

CMF (C2 H6 O Si)n C14 H34 O5 Si2

CCI PMS

PAGE 1-A

PAGE 1-B

— сн<sub>2</sub>— он

CM 3

CRN 55236-42-5

CMF (C3 H6 O)n (C3 H6 O)n C21 H24 O4

CCI IDS, PMS

PAGE 1-A

$$\begin{array}{c|c} Me \\ \hline \\ CH_2-O & CH_3-O \\ \hline \end{array}$$

PAGE 1-B

RN 773091-90-0 HCAPLUS

CN 2-Propenoic acid, 4-chlorophenyl ester, polymer with
2,2-bis[(3-mercapto-1-oxopropoxy)methyl]-1,3-propanediyl
bis(3-mercaptopropanoate) and α-[dimethyl[3(oxiranylmethoxy)propyl]silyl]-ω-[[dimethyl[3(oxiranylmethoxy)propyl]silyl]oxy]poly[oxy(dimethylsilylene)]
(9CI) (CA INDEX NAME)

CRN 130167-23-6

CMF (C2 H6 O Si)n C16 H34 O5 Si2

CCI PMS

CM 2

CRN 13633-87-9 CMF C9 H7 Cl O2

$$\begin{array}{c|c} O \\ \parallel \\ C - C + = CH_2 \end{array}$$

CM 3

CRN 7575-23-7 CMF C17 H28 O8 S4

$$\begin{array}{c} \text{O} & \text{CH}_2-\text{O}-\text{CH}_2-\text{CH}_2-\text{SH} \\ || & | & | \\ \text{HS}-\text{CH}_2-\text{CH}_2-\text{C}-\text{O}-\text{CH}_2-\text{C}-\text{C}-\text{CH}_2-\text{C}-\text{CH}_2-\text{SH} \\ || & | & | \\ \text{HS}-\text{CH}_2-\text{CH}_2-\text{C}-\text{O}-\text{CH}_2 \\ || & \text{O} \end{array}$$

RN 773091-91-1 HCAPLUS

CN 2-Propenoic acid, 4-chlorophenyl ester, polymer with
2,2-bis[(3-mercapto-1-oxopropoxy)methyl]-1,3-propanediyl
bis(3-mercaptopropanoate), α-[dimethyl[3 (oxiranylmethoxy)propyl]silyl]-ω-[[dimethyl[3 (oxiranylmethoxy)propyl]silyl]oxy]poly[oxy(dimethylsilylene)] and
α,α'-[(1-methylethylidene)di-4,1-phenylene]bis[ω [(1-oxo-2-propenyl)oxy]poly(oxy-1,2-ethanediyl)] (9CI) (CA INDEX NAME)

CM 1

CRN 130167-23-6

CMF (C2 H6 O Si)n C16 H34 O5 Si2

CCI PMS

CM 2

CRN 64401-02-1

CMF (C2 H4 O)n (C2 H4 O)n C21 H20 O4

CCI PMS

PAGE 1-A

PAGE 1-B

CM 3

CRN 13633-87-9 CMF C9 H7 Cl O2

$$\begin{array}{c|c} O & \\ \parallel & \\ C1 & \end{array}$$

CM 4

CRN 7575-23-7 CMF C17 H28 O8 S4

RN 773091-92-2 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-[4-(1-methyl-1-phenylethyl)phenoxy]ethyl ester, polymer with

2,2-bis[(3-mercapto-

1-oxopropoxy) methyl]-1,3-propanediyl bis(3-mercaptopropanoate) and

 $\alpha$ -[dimethyl[3-(oxiranylmethoxy)propyl]silyl]- $\omega$ -

[[dimethyl[3-(oxiranylmethoxy)propyl]silyl]oxy]poly[oxy(dimethylsi
lylene)] (9CI) (CA INDEX NAME)

CM 1

CRN 191853-23-3 CMF C21 H24 O3

$$\begin{array}{c|c} & \text{Ph} \\ & | \\ \text{H}_2\text{C} & \text{O} \\ & | & | \\ \text{Me}-\text{C}-\text{C}-\text{O}-\text{CH}_2-\text{CH}_2-\text{O} \end{array}$$

CM 2

CRN 130167-23-6

CMF (C2 H6 O Si)n C16 H34 O5 Si2

CCI PMS

CM 3

CRN 7575-23-7

CMF C17 H28 O8 S4

RN 773091-93-3 HCAPLUS

CN 2-Propenoic acid, 2-[4-(1-methyl-1-phenylethyl)phenoxy]ethyl
 ester, polymer with 2,2-bis[(3-mercapto-1-oxopropoxy)methyl]-1,3 propanediyl bis(3-mercaptopropanoate) and α-[dimethyl[3 (oxiranylmethoxy)propyl]silyl]-ω-[[dimethyl[3 (oxiranylmethoxy)propyl]silyl]oxy]poly[oxy(dimethylsilylene)]
 (9CI) (CA INDEX NAME)

CM 1

CRN 130167-23-6

CMF (C2 H6 O Si)n C16 H34 O5 Si2

CCI PMS

CM 2

CRN 86148-08-5 CMF C20 H22 O3

CRN 7575-23-7 CMF C17 H28 O8 S4

$$\begin{array}{c} \text{O} & \text{CH}_2-\text{O}-\text{CH}_2-\text{CH}_2-\text{CH}_2-\text{SH} \\ | | & | & | \\ \text{HS}-\text{CH}_2-\text{CH}_2-\text{C}-\text{O}-\text{CH}_2-\text{C}-\text{CH}_2-\text{O}-\text{C}-\text{CH}_2-\text{CH}_2-\text{SH} \\ | & | & | \\ \text{HS}-\text{CH}_2-\text{CH}_2-\text{C}-\text{O}-\text{CH}_2 & \text{O} \\ | & | & | \\ \text{O} \end{array}$$

RN 773091-94-4 HCAPLUS.

CN 2-Propenoic acid, 2-[4-(1-methyl-1-phenylethyl)phenoxy]ethyl ester, polymer with 2,2-bis[(3-mercapto-1-oxopropoxy)methyl]-1,3-propanediyl bis(3-mercaptopropanoate),  $\alpha$ -[dimethyl[3-(oxiranylmethoxy)propyl]silyl]- $\omega$ -[[dimethyl[3-(oxiranylmethoxy)propyl]silyl]oxy]poly[oxy(dimethylsilylene)] and  $\alpha$ -(1-oxo-2-propenyl)- $\omega$ -(2-naphthalenyloxy)poly(oxy-1,2-ethanediyl) (9CI) (CA INDEX NAME)

CM 1

CRN 286833-74-7

CMF (C2 H4 O)n C13 H10 O2

CCI PMS

CRN 130167-23-6

CMF (C2 H6 O Si)n C16 H34 O5 Si2

CCI PMS

CM 3

CRN 86148-08-5 CMF C20 H22 O3

$$\begin{array}{c|c} & \text{Ph} \\ & \downarrow \\ \text{C-Me} \\ \\ \text{H}_2\text{C---} & \text{CH}_2\text{---} & \text{CH}_2\text{---} & \text{O} \\ \end{array}$$

CM 4

CRN 7575-23-7 CMF C17 H28 O8 S4

RN 773091-95-5 HCAPLUS

CN Propanoic acid, 3-mercapto-, 2,2-bis[(3-mercapto-1-oxopropoxy)methyl]-1,3-propanediyl ester, polymer with  $\alpha$ -[dimethyl[3-(oxiranylmethoxy)propyl]silyl]- $\omega$ -

[[dimethyl[3-(oxiranylmethoxy)propyl]silyl]oxy]poly[oxy(dimethylsilylene)] and  $\alpha$ -(1-oxo-2-propenyl)- $\omega$ -([1,1'-biphenyl]-2-yloxy)poly(oxy-1,2-ethanediyl) (9CI) (CA INDEX NAME)

CM 1

CRN 130167-23-6

CMF (C2 H6 O Si)n C16 H34 O5 Si2

CCI PMS

CM 2

CRN 72009-86-0

CMF (C2 H4 O)n C15 H12 O2

CCI PMS

$$\begin{array}{c|c}
\hline
\text{Ph} \\
\hline
\text{O} & \hline
\text{CH}_2 - \text{CH}_2 - \text{O} \\
\hline
\text{n} & \text{C} - \text{CH} \\
\hline
\text{CH}_2
\end{array}$$

CRN 7575-23-7 CMF C17 H28 O8 S4

$$\begin{array}{c} \text{O} & \text{CH}_2-\text{O}-\text{CH}_2-\text{CH}_2-\text{SH} \\ || & | & | \\ \text{HS}-\text{CH}_2-\text{CH}_2-\text{C}-\text{O}-\text{CH}_2-\text{C}-\text{CH}_2-\text{O}-\text{C}-\text{CH}_2-\text{CH}_2-\text{SH} \\ || & | & | \\ \text{HS}-\text{CH}_2-\text{CH}_2-\text{C}-\text{O}-\text{CH}_2 & \text{O} \\ || & | & | \\ \text{O} \end{array}$$

RN 773091-96-6 HCAPLUS

CN Propanoic acid, 3-mercapto-, 2,2-bis[(3-mercapto-1-oxopropoxy)methyl]-1,3-propanediyl ester, polymer with  $\alpha$ -[dimethyl[3-(oxiranylmethoxy)propyl]silyl]- $\omega$ -

[[dimethyl[3-(oxiranylmethoxy)propyl]silyl]oxy]poly[oxy(dimethylsilylene)] and  $\alpha$ -(1-oxo-2-propenyl)- $\omega$ -(2-naphthalenyloxy)poly(oxy-1,2-ethanediyl) (9CI) (CA INDEX NAME)

CM 1

CRN 286833-74-7

CMF (C2 H4 O)n C13 H10 O2

CCI PMS

$$\begin{array}{c|c}
\hline
 & O \\
\hline
 & CH_2 - CH_2 - O \\
\hline
 & D \\
\hline
 & C - CH = CH_2
\end{array}$$

CRN 130167-23-6

CMF (C2 H6 O Si)n C16 H34 O5 Si2

CCI PMS

CM 3

CRN 7575-23-7

CMF C17 H28 O8 S4

RN 773091-97-7 HCAPLUS

CN 2-Propenoic acid, 4-chlorophenyl ester, polymer with
2,2-bis[(3-mercapto-1-oxopropoxy)methyl]-1,3-propanediyl
bis(3-mercaptopropanoate), α-[dimethyl[3(oxiranylmethoxy)propyl]silyl]-ω-[[dimethyl[3(oxiranylmethoxy)propyl]silyl]oxy]poly[oxy(dimethylsilylene)] and

 $\alpha,\alpha'$ -[9H-fluoren-9-ylidenebis([1,1'-biphenyl]-5,2-diyl)]bis[ $\omega$ -[(1-oxo-2-propenyl)oxy]poly(oxy-1,2-ethanediyl)] (9CI) (CA INDEX NAME)

CM 1

CRN 337966-87-7

CMF (C2 H4 O)n (C2 H4 O)n C43 H30 O4

CCI PMS

PAGE 1-A

$$H_2C = CH - C - O - CH_2 - CH_2 - O$$
 $Ph$ 
 $R$ 

PAGE 2-A

$$\begin{array}{c|c} & O \\ \hline \\ & CH_2 - CH_2 \\ \hline \\ & D \\ \hline \end{array} \begin{array}{c} O \\ \hline \\ & D \\ \hline \end{array} \begin{array}{c} O \\ \hline \\ & CH \\ \hline \end{array} \begin{array}{c} O \\ \hline \end{array} \begin{array}{c} O \\ \hline \\ & CH \\ \hline \end{array} \begin{array}{c} O \\ \hline \end{array} \begin{array}{c} O \\ \hline \\ & CH \\ \hline \end{array} \begin{array}{c} O \\ \hline \end{array}$$

CM 2

CRN 130167-23-6

CMF (C2 H6 O Si)n C16 H34 O5 Si2

CCI PMS

CRN 13633-87-9 CMF C9 H7 Cl O2

$$\begin{array}{c|c} O & \\ \parallel & \\ C \parallel & \\ \end{array}$$

CM 4

CRN 7575-23-7 CMF C17 H28 O8 S4

RN 773091-98-8 HCAPLUS

CN Poly[oxy(dimethylsilylene)],  $\alpha$ -[dimethyl[3-(oxiranylmethoxy)propyl]silyl]- $\omega$ -[[dimethyl[3-(oxiranylmethoxy)propyl]silyl]oxy]-, polymer with  $\alpha$ -(1-oxo-2-propenyl)- $\omega$ -(2-naphthalenyloxy)poly(oxy-1,2-ethanediyl) and Sanaid SI 60 (9CI) (CA INDEX NAME)

CRN 286833-74-7

CMF (C2 H4 O)n C13 H10 O2

CCI PMS

CM 2

CRN 192391-58-5

CMF Unspecified

CCI MAN

### \*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

CM 3

CRN 130167-23-6

CMF (C2 H6 O Si)n C16 H34 O5 Si2

CCI PMS

RN 773092-00-5 HCAPLUS

CN Poly[oxy(dimethylsilylene)], α-[dimethyl[3 (oxiranylmethoxy)propyl]silyl]-ω-[[dimethyl[3 (oxiranylmethoxy)propyl]silyl]oxy]-, polymer with
 3-ethyl-3-(phenoxymethyl)oxetane, α-(1-oxo-2-propenyl) ω-(2-naphthalenyloxy)poly(oxy-1,2-ethanediyl) and Sanaid SI
 20 (9CI) (CA INDEX NAME)

CM 1

CRN 773080-63-0

CMF Unspecified

CCI MAN

### \*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

CM 2

CRN 286833-74-7

CMF (C2 H4 O)n C13 H10 O2

CCI PMS

CM 3

CRN 130167-23-6

CMF (C2 H6 O Si)n C16 H34 O5 Si2

CCI PMS

CM 4

CRN 3897-65-2 CMF C12 H16 O2

RN 773092-01-6 HCAPLUS
CN Poly[oxy(dimethylsilylene)],  $\alpha$ -[dimethyl[3-(oxiranylmethoxy)propyl]silyl]- $\omega$ -[[dimethyl[3-(oxiranylmethoxy)propyl]silyl]oxy]-, polymer with  $\alpha$ -(1-oxo-2-propenyl)- $\omega$ -(2-naphthalenyloxy)poly(oxy-1,2-ethanediyl), 3,3'-[oxybis(methylene)]bis[3-ethyloxetane] and Sanaid SI 20 (9CI) (CA INDEX NAME)

CM 1

CRN 773080-63-0 CMF Unspecified CCI MAN

# \*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

CM 2

CRN 286833-74-7 CMF (C2 H4 O)n C13 H10 O2 CCI PMS

$$O = \begin{bmatrix} CH_2 - CH_2 - O \end{bmatrix} \begin{bmatrix} O \\ CH_2 - CH_2 \end{bmatrix}$$

CM 3

CRN 130167-23-6 CMF (C2 H6 O Si)n C16 H34 O5 Si2 CCI PMS

CRN 18934-00-4 CMF C12 H22 O3

RN 773092-02-7 HCAPLUS

CN Poly[oxy(dimethylsilylene)], α-[dimethyl[3-(oxiranylmethoxy)propyl]silyl]-ω-[[dimethyl[3-(oxiranylmethoxy)propyl]silyl]oxy]-, polymer with 3-ethyl-3-[[(2-ethylhexyl)oxy]methyl]oxetane, α-(1-oxo-2propenyl)-ω-(2-naphthalenyloxy)poly(oxy-1,2-ethanediyl) and Sanaid SI 20 (9CI) (CA INDEX NAME)

CM 1

CRN 773080-63-0 CMF Unspecified CCI MAN

### \*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

CM 2

CRN 298695-60-0 CMF C14 H28 O2

CRN 286833-74-7

CMF (C2 H4 O)n C13 H10 O2

CCI PMS

CM 4

CRN 130167-23-6

CMF (C2 H6 O Si)n C16 H34 O5 Si2

CCI PMS

RN 773092-03-8 HCAPLUS

CN Poly[oxy(dimethylsilylene)], α-[dimethyl[3 (oxiranylmethoxy)propyl]silyl]-ω-[[dimethyl[3 (oxiranylmethoxy)propyl]silyl]oxy]-, polymer with
 α-(1-oxo-2-propenyl)-ω-(2-naphthalenyloxy)poly(oxy-1,2 ethanediyl), 3,3'-[1,4-phenylenebis(methyleneoxymethylene)]bis[3 ethyloxetane] and Sanaid SI 20 (9CI) (CA INDEX NAME)

CM 1

CRN 773080-63-0 CMF Unspecified

CCI MAN

## \*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

CM 2

CRN 286833-74-7

CMF (C2 H4 O)n C13 H10 O2

CCI PMS

CM 3

CRN 142627-97-2 CMF C20 H30 O4

$$\begin{array}{c|c} & & & \\ \hline \\ \text{CH}_2 - \text{O} - \text{CH}_2 \\ \hline \end{array}$$

CM 4

CRN 130167-23-6

CMF (C2 H6 O Si)n C16 H34 O5 Si2

CCI PMS

Me

771534-34-0P, Propylene glycol diglycidyl ether-pentaerythritol mercaptopropionate-4-chlorophenyl acrylate copolymer
771534-35-1P 773081-54-2P 773091-90-0P
773091-91-1P 773091-92-2P 773091-93-3P
773091-94-4P 773091-95-5P 773091-96-6P

chlorophenyl acrylate and  $\alpha, \omega$ -dihydroxy

**773091-97-7P 773091-98-8P** 773091-99-9P

773092-00-5P 773092-01-6P 773092-02-7P

773092-03-8P

polypropyleneglycol

(holog. recording medium and recording method)

diisocyanate-end polypropyleneglycol 25322-69-4DP,

Polypropyleneglycol, diisocyanate-end, reaction products with

ether-pentaerythritol mercaptopropionate-4-bromostyrene copolymer

771534-33-9P, Propylene glycol diglycidyl

L37 ANSWER 8 OF 38 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER:

2004:508030 HCAPLUS

DOCUMENT NUMBER:

141:79425

TITLE:

Formation of pixel elements of color filters,

ribbed substrates, and rib-forming

compositions therefor

INVENTOR(S):

Uraki, Hisashi; Fukuchi, Yoshihisa

PATENT ASSIGNEE(S):

Toyo Ink Mfg. Co., Ltd., Japan

SOURCE:

Jpn. Kokai Tokkyo Koho, 20 pp.

CODEN: JKXXAF

DOCUMENT TYPE:

Patent

KIND

LANGUAGE:

Japanese

FAMILY ACC. NUM. COUNT:

PATENT NO.

PATENT INFORMATION:

DATE APPLICATION NO.

DATE

JP 2004177948 A2 20040624 JP 2003-379531

2003

1110

PRIORITY APPLN. INFO.: JP 2002-326318; A

2002

1111

The compns. contain (0.01-10%) vinyl polymers containing AB ethylenically

unsatd. double bonds and polyorganosiloxane chains and optionally photopolymn. initiators. The compns. form barrier ribs which suppress color mixing or blurring of pixel-forming inks on jet printing.

709649-40-1P IT

> (formation of pixel elements of color filters forming siloxane polymer-containing rib patterns)

709649-40-1 HCAPLUS RN

CN 2-Propenoic acid, 2-methyl-, butyl ester, polymer with

 $\alpha$ -[dimethyl[3-[(2-methyl-1-oxo-2-propenyl)oxy]propyl]silyl]-

 $\omega$ -[(trimethylsilyl)oxy]poly[oxy(dimethylsilylene)] and

oxiranylmethyl 2-methyl-2-propenoate, 2-propenoate, graft,

polymer

with 2-ethyl-2-[[(1-oxo-2-propenyl)oxy]methyl]-1,3-propanediyl di-2-propenoate (9CI) (CA INDEX NAME)

CRN 15625-89-5 CMF C15 H20 O6

CM 2

CRN 709649-39-8

CMF (C8 H14 O2 . C7 H10 O3 . (C2 H6 O Si)n C12 H26 O3 Si2)x . x C3 H4 O2

CM 3

CRN 79-10-7 CMF C3 H4 O2

CM 4

CRN 657393-71-0

CMF (C8 H14 O2 . C7 H10 O3 . (C2 H6 O Si)n C12 H26 O3 Si2)x

CCI PMS

CM 5

CRN 123109-42-2

CMF (C2 H6 O Si)n C12 H26 O3 Si2

CCI PMS

CRN 106-91-2 CMF C7 H10 O3

CM 7

CRN 97-88-1 CMF C8 H14 O2

$$\begin{array}{c|c} \text{O} & \text{CH}_2 \\ \parallel & \parallel \\ \text{n-BuO-C-C-Me} \end{array}$$

IC ICM G02B005-20

ICS C08F008-00; C08F290-06; B41J002-01

CC 74-13 (Radiation Chemistry, **Photochemistry**, and **Photographic** and Other Reprographic Processes)
Section cross-reference(s): 38, 73

IT 868-77-9DP, 2-Hydroxyethyl methacrylate, reaction products with isocyanato-bearing graft copolymers, polymers with trimethylolpropane trimethacrylate 56793-67-0P, Butyl methacrylate-methacrylic acid-methyl methacrylate-styrene copolymer 657393-70-9DP, reaction products with hydroxyethyl methacrylate, polymer with trimethylolpropane trimethacrylate 709632-98-4DP, trimethylsilyl-terminated, reaction products with hydroxyethyl methacrylate, polymer with trimethylolpropane trimethacrylate 709649-27-4P, Butyl methacrylate-2-hydroxyethyl methacrylate-Silaplane FM 0721 graft copolymer ester with isophorone diisocyanate 2-hydroxyethyl acrylate adduct (1:1),

polymer wth NK Ester ATMPT 709649-38-7DP, trimethylsilyl ether 709649-40-1P 709649-43-4DP, trimethylsilyl terminated (formation of pixel elements of color filters forming siloxane polymer-containing rib patterns)

L37 ANSWER 9 OF 38 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER:

2004:118493 HCAPLUS

DOCUMENT NUMBER:

140:190067

TITLE:

Photosensitive composition for manufacturing color filter barrier wall of display using

ink jet printing

INVENTOR(S):

Uraki, Hisashi; Fukuchi, Yoshihisa

PATENT ASSIGNEE(S):

Toyo Ink Mfg. Co., Ltd., Japan

Jpn. Kokai Tokkyo Koho, 16 pp. CODEN: JKXXAF

DOCUMENT TYPE:

Patent

LANGUAGE:

SOURCE:

Japanese

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

DATE	PATENT NO.	KIND	DATE	APPLICATION NO.
	JP 2004045910	<b>A</b> 2	20040212	JP 2002-205040

2002

0715

PRIORITY APPLN. INFO.:

JP 2002-205040

2002

0715

AB The title photosensitive composition comprises (A) a vinyl polymer

containing a crosslinking group and polyorganosiloxane chain, and (B)

a vinyl polymer containing a crosslinking group. The crosslinking

group is hydroxy, carboxyl, isocyano, and/or epoxy. The composition

may further contain a photoinitiator.

IT 657393-71-0P, Butyl methacrylate-glycidyl

methacrylate-Silaplane FM 0721 graft copolymer

(photosensitive composition for manufacturing color filter barrier wall of

display using ink jet printing)

RN 657393-71-0 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, butyl ester, polymer with  $\alpha$ -[dimethyl[3-[(2-methyl-1-oxo-2-propenyl)oxy]propyl]silyl]-  $\omega$ -[(trimethylsilyl)oxy]poly[oxy(dimethylsilylene)] and oxiranylmethyl 2-methyl-2-propenoate, graft (9CI) (CA INDEX

NAME)

CM 1

CRN 123109-42-2

CMF (C2 H6 O Si)n C12 H26 O3 Si2

CCI PMS

CM 2

CRN 106-91-2 CMF C7 H10 O3

CM 3

CRN 97-88-1 CMF C8 H14 O2

$$\begin{array}{c|c} & \text{O} & \text{CH}_2 \\ \parallel & \parallel \\ \text{n-BuO-C-C-Me} \end{array}$$

IC ICM G02B005-20

```
ICS G02F001-1335
     74-13 (Radiation Chemistry, Photochemistry, and
CC
     Photographic and Other Reprographic Processes)
     Section cross-reference(s): 42, 73
     photosensitive compn color filter barrier wall ink
ST
     jet printing
IT
     Inks
        (jet-printing; photosensitive composition for manufacturing
        color filter barrier wall of display using ink
        jet printing)
IT
     Polysiloxanes, preparation
        (methacrylate-, graft; photosensitive composition for
manufacturing color
        filter barrier wall of display using ink jet
        printing)
     Ink-jet printing
IT
     Optical filters
     Optical imaging devices
    Photoresists
        (photosensitive composition for manufacturing color filter
barrier wall of
        display using ink jet printing)
     56793-67-0P, Butyl methacrylate-methacrylic acid-methyl
IT
     methacrylate-styrene copolymer 657393-69-6P, Butyl
     methacrylate-2-hydroxyethyl methacrylate-Silaplane FM 0721 graft
     copolymer 657393-70-9P, Butyl methacrylate-2-
     (methacryloyloxy) ethyl isocyanate-Silaplane FM 0721 graft
     copolymer 657393-71-0P, Butyl methacrylate-glycidyl
     methacrylate-Silaplane FM 0721 graft copolymer
        (photosensitive composition for manufacturing color filter
barrier wall of
        display using ink jet printing)
L37 ANSWER 10 OF 38 HCAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER:
                         2004:97722 HCAPLUS
DOCUMENT NUMBER:
                         140:129937
                         Ink compositions for marking pens for
TITLE:
                         recording materials
INVENTOR(S):
                         Fujiwara, Yoshito
PATENT ASSIGNEE(S):
                         Mitsubishi Pencil Co., Ltd., Japan
                         Jpn. Kokai Tokkyo Koho, 10 pp.
SOURCE:
                         CODEN: JKXXAF
DOCUMENT TYPE:
                         Patent
LANGUAGE:
                         Japanese
FAMILY ACC. NUM. COUNT:
```

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO.

DATE

-----
JP 2004035823 A2 20040205 JP 2002-197415

2002

0705

PRIORITY APPLN. INFO.:

JP 2002-197415

2002

0705

- AB The ink compns., having surface tension ≤22 mN/m at 25° and showing smooth writability on substrates (e.g., labels of CD-R disks), contain colorants, solvents containing C≤4 aliphatic alcs. and C≤6 glycol derivs., styrene-acrylic acid copolymer (I) and/or styrene-α-methylstyrene-acrylic acid copolymer, and polyoxyalkylene -modified polysiloxanes (HLB 1-14). Thus, an ink contained Valifast Black 3820 10.0, I (Joncryl 67) 3.0, propylene glycol monomethyl ether 53.9, EtOH 30.0, benzyl alc. 3.0, and polyoxyalkylene-modified polysiloxane (L 720, HLB 7) 0.1 part.
- IC ICM C09D011-16
- CC 42-12 (Coatings, Inks, and Related Products)
- ST polyoxylalylene polysiloxane marking ink **recording**material; acrylic styrene copolymer marking ink; surface tension
  marking ink surfactant writability
- IT Polyoxyalkylenes, uses
  - (di-Me polysiloxane-, Silwet FZ

2122; ink compns. for marking pens for recording materials)

IT Polysiloxanes, uses

(di-Me, 3-hydroxypropyl Me, ethers with polyethylene-polypropylene glycol mono-Bu ether, Silwet L 720; ink compns. for marking pens for recording materials)

IT Polysiloxanes, uses

(di-Me, polyoxyalkylene-, Silwet FZ 2122; ink compns. for marking pens for recording materials)

IT Optical recording materials
(ink compns. for marking pens for recording materials)

```
ΙT
     Inks
        (marking; ink compns. for marking pens for recording
        materials)
     Surfactants
IT
        (polyoxyalkylene-polysiloxanes; ink compns.
        for marking pens for recording materials)
IT
     Polysiloxanes, uses
        (polyoxyethylene-, Silwet FZ 2104, Silwet FZ 2191; ink compns.
        for marking pens for recording materials)
     52831-04-6, Styrene-\alpha-methylstyrene-acrylic acid copolymer
IT
        (Joncryl 682; ink compns. for marking pens for
        recording materials)
     25085-34-1, Joncryl 67
IT
        (Joncryl 690; ink compns. for marking pens for
        recording materials)
L37 ANSWER 11 OF 38 HCAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER:
                        2003:568630 HCAPLUS
DOCUMENT NUMBER:
                         139:140985
TITLE:
                         Curable epoxy resin composition, surface
                        modification process, ink-
                         jet recording head and
                         ink-jet recording
                         apparatus
                         Shimomura, Akihiko; Noguchi, Hiromichi;
INVENTOR(S):
                         Imamura, Isao
PATENT ASSIGNEE(S):
                        Canon Kabushiki Kaisha, Japan
SOURCE:
                        Eur. Pat. Appl., 24 pp.
                        CODEN: EPXXDW
DOCUMENT TYPE:
                        Patent
LANGUAGE:
                        English
FAMILY ACC. NUM. COUNT:
PATENT INFORMATION:
    PATENT NO.
                               DATE
                        KIND
                                         APPLICATION NO.
DATE
                        ----
     -----
    EP 1329472 A1 20030723 EP 2003-885
2003
0115
        R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE,
            MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ,
            EE, HU, SK
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20030730 CN 2003-100277

Α

CN 1432600

2003 0110 JP 2003277472 A2 20031002 JP 2003-3825 2003 0110 US 2003170401 **A**1 20030911 US 2003-341373 2003 0114 PRIORITY APPLN. INFO.: JP 2002-8441 Α 2002 0117 AB The title composition comprises (i) a first epoxy resin having ≥1 water-repellency-imparting group and ≥2 cyclic aliphatic epoxy groups, and having Mn 8000-22,000 and polydispersity 3.5-5.0, (ii) a second epoxy resin having ≥1 water-repellency-imparting group and ≥2 cyclic aliphatic epoxy groups, having Mn 2500-8000 and polydispersity 1.5-3.0, and (iii) a cationic polymerization catalyst. The composition is useful for surface treatment to impart water repellency or ink repellency to an article surface, especially for forming coating in a pattern by UV irradiation IT 473272-74-1 (water-repellent; epoxy resin composition for surface modification of ink-jet recording head and ink-jet recording apparatus) RN 473272-74-1 HCAPLUS 2-Propenoic acid, 2-methyl-, 7-oxabicyclo[4.1.0]hept-3-ylmethyl CN ester, polymer with  $\alpha$ -[dimethyl[3-[(2-methyl-1-oxo-2propenyl) oxy propyl] silyl] - $\omega$ -[(trimethylsilyl) oxy] poly[oxy(d imethylsilylene)], graft (9CI) (CA INDEX NAME) CM CRN 123109-42-2

CMF (C2 H6 O Si)n C12 H26 O3 Si2 CCI PMS

CM 2

CRN 82428-30-6 CMF C11 H16 O3

$$\begin{array}{c|c} \text{O} & \text{CH}_2 \\ \parallel & \parallel \\ \text{CH}_2\text{--} \text{O--} \text{C--} \text{C--} \text{Me} \end{array}$$

IC ICM C08G059-30

ICS C08G059-32; C08G059-38; C08L063-00; B41J002-16

CC 74-6 (Radiation Chemistry, **Photochemistry**, and **Photographic** and Other Reprographic Processes)

ST epoxy resin compn water repellency ink jet recording head

IT Ink-jet printer heads

Ink-jet printers

(epoxy resin composition for surface modification of ink-

jet recording head and ink-

jet recording apparatus)

IT Epoxy resins, uses

(water-repellent; epoxy resin composition for surface modification

of ink-jet recording head and

ink-jet recording apparatus)

IT 68050-65-7, Bisphenol AF-epichlorohydrin copolymer 160099-23-0 (compatibilizers; epoxy resin composition for surface modification

of ink-jet recording head and ink-jet recording apparatus)

IT 473272-74-1 565232-42-0

(water-repellent; epoxy resin composition for surface

modification

of ink-jet recording head and ink-jet recording apparatus)

REFERENCE COUNT:

5 THERE ARE 5 CITED REFERENCES AVAILABLE

FOR THIS RECORD. ALL CITATIONS

AVAILABLE

IN THE RE FORMAT

L37 ANSWER 12 OF 38 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER:

2002:946891 HCAPLUS

DOCUMENT NUMBER:

138:31051

TITLE:

Lithographic printing plate comprising

protective overlayer

INVENTOR(S):

Savariar-Hauck, Celin; Hauck, Gerhard; Frank,

Dietmar; Fiebag, Ulrich

PATENT ASSIGNEE(S):

Germany

SOURCE:

U.S. Pat. Appl. Publ., 13 pp.

CODEN: USXXCO

DOCUMENT TYPE:

LANGUAGE:

Patent English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

DATE	PATENT NO.	KIND	DATE	APPLICATION NO.
	US 2002187425	A1	20021212	US 2001-805327
2001				

0313

US 6613494 B2 20030902 '

EP 1241003 A2 20020918 EP 2002-5304

.2002

0312

EP 1241003 A3 20031029

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE,

MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR

PRIORITY APPLN. INFO.: US 2001-805327 A

2001

0313

AB Pos.-working imageable printing plate and methods for the plate preparation are disclosed. The printing plate comprises a hydrophilic substrate; a bottom layer, which contains a pos.-working photosensitive composition; and a protective overlayer, which has an overlayer material that reduces the solubility of the photosensitive composition in an aqueous alkaline developer. The overlayer may be conveniently applied by a dip and rinse procedure. The object of the invention is to provide a printing plate that has improved photospeed but in which the unexposed regions are resistant to alkaline developers and do not require a prolonged conditioning step as part of the manufacturing process. IC ICM G03F007-11 430272100; 430273100 NCL CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes) IT Polyoxyalkylenes, uses (Lubrimet P 900; pos.-working lithog, printing plate comprising protective overlayer) IT Polyethers, uses (di-Me siloxane-, Byk 307; pos.-working lithog. printing plate comprising protective overlayer) IT Polysiloxanes, uses (di-Me, 3-hydroxypropyl Me, ethers with polyethylene-polypropylene glycol acetate, DC 190; pos.-working lithog. printing plate comprising protective overlayer) IT Polysiloxanes, uses (di-Me, polyether-, Byk 307; pos.-working lithog. printing plate comprising protective overlayer) IT Polysiloxanes, uses (glycidyl group-containing, Edaplan LA 411; pos.-working lithog. printing plate comprising protective overlayer) L37 ANSWER 13 OF 38 HCAPLUS COPYRIGHT 2005 ACS on STN ACCESSION NUMBER: 2002:658607 HCAPLUS

Method for producing ink jet

137:208403

DOCUMENT NUMBER:

TITLE:

recording head, and ink jet recording head produced

by such method Suzuki, Toshio

PATENT ASSIGNEE(S):

SOURCE:

Canon Kabushiki Kaisha, Japan U.S. Pat. Appl. Publ., 18 pp.

CODEN: USXXCO

DOCUMENT TYPE:

INVENTOR(S):

LANGUAGE:

Patent English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

DATE	PATENT NO.	KIND	DATE	APPLICATION NO.
DATE				
	US 2002119248	A1	20020829	US 2002-79898
2002				
0222			n	

US 6811715 PRIORITY APPLN. INFO.: B2 20041102

JP 2001-47082

Α

2001

0222

AB A method for producing an ink jet recording head, comprises steps of forming, on a substrate, a solid layer composed of soluble resin and having a pattern for constituting a liquid flow path; forming an inorg.

film

by low temperature film formation so as to cover the solid layer; forming a layer of a head forming material so as to cover the inorg. film; removing a part of the inorg. film for forming a discharge port; and removing the solid film thereby forming a liquid

flow path communicating with the discharge port. An object of the

present invention is to provide a method for producing an ink jet recording head, capable of avoiding peeling of the flow path forming material from the substrate even in case of a long-sized head, and enabling satisfactory range of material selection and satisfactory productivity. Another object of the present invention is to provide a method for producing an ink jet

recording head showing excellent durability of the
 hydrophilic film in the liquid flow path and of the water
repellancy

on the discharge port face.

IT 186294-09-7

(water-repellent resin for ink jet recording head)

RN 186294-09-7 HCAPLUS

CN Phenol, 4,4'-(1-methylethylidene)bis-, polymer with (chloromethyl)oxirane, 1,1,3,3-tetramethyl-1,3-bis[3-(oxiranylmethoxy)propyl]disiloxane and

[[(3,3,4,4,5,5,6,6,7,7,8,8,8-tridecafluorooctyl)oxy]methyl]oxirane (9CI) (CA INDEX NAME)

CM 1

CRN 122193-68-4 CMF C11 H9 F13 O2

$$CH_2-CH_2-CH_2-(CF_2)_5-CF_3$$

CM 2

CRN 126-80-7 CMF C16 H34 O5 Si2

CM 3

CRN 106-89-8 CMF C3 H5 Cl O

CRN 80-05-7 CMF C15 H16 O2

IC ICM C23C016-00 ICS B05D003-00

NCL 427248100

CC 74-6 (Radiation Chemistry, **Photochemistry**, and **Photographic** and Other Reprographic Processes)

ST ink jet recording head printer manuf

IT Sputtering

(etching, reactive; method for producing ink
jet recording head)

Ink-jet printer heads

Photoresists

Sputtering

Vapor deposition process

(method for producing ink jet

recording head)

IT Etching

IT

(sputter, reactive; method for producing ink
jet recording head)

IT 452296-36-5, Epikote 828-Fujicure 6010 copolymer (coating for ink jet recording head)

IT 132702-22-8, AZ-4903 452310-23-5, MF 58

(photoresist for ink jet recording head)

7440-25-7, Tantalum, uses IT

(substrate in ink jet recording

7429-90-5, Aluminum, uses 7440-02-0, Nickel, uses 7440-21-3, IT Silicon, uses 7440-50-8, Copper, uses (substrate of ink jet recording

head)

IT 186294-09-7

(water-repellent resin for ink jet

recording head)

REFERENCE COUNT:

23 THERE ARE 23 CITED REFERENCES AVAILABLE

FOR THIS RECORD. ALL CITATIONS

AVAILABLE

IN THE RE FORMAT

L37 ANSWER 14 OF 38 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER:

2002:503671 HCAPLUS

DOCUMENT NUMBER:

137:64382

TITLE:

Elastic polyurethane foam parts and their use

in image formation devices

INVENTOR(S):

Sakata, Junji; Yamazaki, Hirotaka

PATENT ASSIGNEE(S):

Bridgestone Corp., Japan

SOURCE:

Jpn. Kokai Tokkyo Koho, 9 pp.

CODEN: JKXXAF

DOCUMENT TYPE:

Patent

LANGUAGE:

Japanese

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

DATE	PATENT NO.	KIND	DATE	APPLICATION NO.
22				
	JP 2002187929	A2	20020705	JP 2000-388889
2000				
1221	US 2002091170	A1	20020711	US 2001-985771
2001				
	US 6818674 ITY APPLN. INFO.:	B2	20041116	JP 2000-339883 A

2000

1108

JP 2000-388889 A

2000

1221

AB The parts with low surface friction resistance and fine cells for rollers in electrophotog. apparatus, electrostatic **recording** apparatus, etc., are obtained by (A) stirring urethane prepolymers

prepared from modified silicone oils, polyols, and polyisocyanates

with blowing agents and foam stabilizers or (B) stirring polyols, polyisocyanates, modified silicone oils, blowing agents, and foam stabilizers, wherein the modified silicone oils have polyisocyanate-reactive groups, and the foam stabilizers are silicones modified with polyethers having oxyethylene unit weight ratio 50-100%. Thus, a prepolymer prepared from ethylene oxide-propylene oxide copolymer glycerin ether, TDI, X 22-176B (alc.-modified silicone oil having 2 functional groups at one terminal) and a mixture containing conductive C, a catalyst in dipropylene glycol, and a polyether-modified silicone foam stabilizer (having polyoxyethylene content 70% in the polyether) were mixed, cast in a mold, and cured to give a conductive polyurethane foam (surface friction resistance 0.87 N), which was used to give a toner supplying roller in a dry electrophotog. apparatus

showing good printability.

IT 439667-99-9P, Dipropylene glycol-ethylene oxide-propylene oxide copolymer glycerin ether-crude MDI-TDI-X 22-176B copolymer (elastic polyurethane foam parts and their use in image formation devices)

RN 439667-99-9 HCAPLUS

CN Isocyanic acid, polymethylenepolyphenylene ester, polymer with
α-[[3-[2,2-bis(hydroxymethyl)butoxy]propyl]dimethylsilyl]ω-[(trimethylsilyl)oxy]poly[oxy(dimethylsilylene)],
1,3-diisocyanatomethylbenzene, methyloxirane polymer with oxirane
ether with 1,2,3-propanetriol (3:1), and oxybis[propanol] (9CI)
(CA INDEX NAME)

CRN 128147-46-6 CMF (C2 H6 O Si)n C14 H34 O4 Si2 CCI PMS

CM 2

CRN 26471-62-5 CMF C9 H6 N2 O2 CCI IDS

D1-Me

CM 3

CRN 25265-71-8 CMF C6 H14 O3 CCI IDS

2 (D1-Me)

CRN 9016-87-9 CMF Unspecified CCI PMS, MAN

## \*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

CM 5

CRN 9082-00-2

CMF C3 H8 O3 . 3 (C3 H6 O . C2 H4 O)  $\mathbf{x}$ 

CM 6

CRN 56-81-5 CMF C3 H8 O3

он 
$$|$$
 но—  ${\rm CH_2}-{\rm CH}-{\rm CH_2}-{\rm OH}$ 

CM 7

CRN 9003-11-6

CMF (C3 H6 O . C2 H4 O)x

CCI PMS

CM 8

CRN 75-56-9 CMF C3 H6 O

CH<sub>3</sub>

CM 9

CRN 75-21-8 CMF C2 H4 O

IT 439667-98-8P, Dipropylene glycol-ethylene oxide-propylene oxide copolymer glycerin ether-TDI-X 22-176B copolymer (rubber; elastic polyurethane foam parts and their use in image

formation devices)

RN 439667-98-8 HCAPLUS

CN Propanol, oxybis-, polymer with  $\alpha$ -[[3-[2,2-bis(hydroxymethyl)butoxy]propyl]dimethylsilyl]- $\omega$ -[(trimethylsilyl)oxy]poly[oxy(dimethylsilylene)], 1,3-diisocyanatomethylbenzene and methyloxirane polymer with oxirane ether with 1,2,3-propanetriol (3:1) (9CI) (CA INDEX NAME)

CM 1

CRN 128147-46-6 CMF (C2 H6 O Si)n C14 H34 O4 Si2 CCI PMS

CM 2

CRN 26471-62-5 CMF C9 H6 N2 O2

CCI IDS

 ${\tt D1}^-{\tt Me}$ 

CM 3

CRN 25265-71-8 CMF C6 H14 O3 CCI IDS

HO-CH2-CH2-O-CH2-CH2-OH

2 (D1-Me)

CM 4

CRN 9082-00-2

CMF C3 H8 O3 . 3 (C3 H6 O . C2 H4 O)  $\mathbf x$ 

CM 5

CRN 56-81-5

CMF C3 H8 O3

$$\begin{array}{c} \text{OH} \\ | \\ \text{HO-} \ \text{CH}_2\text{--} \ \text{CH-} \ \text{CH}_2\text{--} \ \text{OH} \end{array}$$

CM 6

CRN 9003-11-6

CMF (C3 H6 O . C2 H4 O)x CCI PMS

CM 7

CRN 75-56-9 CMF C3 H6 O

CH<sub>3</sub>

CM 8

CRN 75-21-8 CMF C2 H4 O



IC ICM C08G018-61 ICS F16C013-00; G03G015-02; G03G015-08; G03G015-16; C08G018-61; C08G101-00

CC 39-9 (Synthetic Elastomers and Natural Rubber) Section cross-reference(s): **74** 

IT 439667-99-9P, Dipropylene glycol-ethylene oxide-propylene oxide copolymer glycerin ether-crude MDI-TDI-X 22-176B copolymer (elastic polyurethane foam parts and their use in image formation devices)

9082-00-2DP, Ethylene oxide-propylene oxide copolymer glycerin ether, polymers with TDI and alc.-modified silicones 26471-62-5DP, TDI, polymers with polyether polyols and alc.-modified silicones 439667-98-8P, Dipropylene glycol-ethylene oxide-propylene oxide copolymer glycerin ether-TDI-X 22-176B copolymer

(rubber; elastic polyurethane foam parts and their use in

image

formation devices)

L37 ANSWER 15 OF 38 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER:

2002:10038 HCAPLUS

DOCUMENT NUMBER:

136:55389

TITLE:

Ink, ink set, ink-jet recording process, ink cartridge, recording

unit and ink-jet recording apparatus

INVENTOR(S):

Osumi, Koichi; Mishina, Shinya; Teraoka,

Hisashi; Yakushigawa, Yuko

PATENT ASSIGNEE(S):

Canon Kabushiki Kaisha, Japan

SOURCE:

Eur. Pat. Appl., 36 pp.

CODEN: EPXXDW

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO.

DATE

\_\_\_\_\_\_

EP 1167474 A1 20020102 EP 2001-115205

2001

0622

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE,

MC, PT, IE, SI, LT, LV, FI, RO

JP 2002080768 A2 20020319 JP 2001-191881

2001

0625

US 6474804 B2 20021105 US 2001-887259

2001

0625

PRIORITY APPLN. INFO.: JP 2000-190331 A

2000

0623

AB An ink comprises a dye, a silicon-containing surfactant, an ethylene

oxide adduct of acetylene glycol and a liquid medium, wherein a weight

ratio of the silicon-containing surfactant to the ethylene oxide adduct of acetylene glycol is not lower than 1/5000, but lower than 1/20. An ink-jet **recording** process comprises the

step of ejecting the ink by an ink-jet system. An ink set comprises in combination a first dye having a certain color tone, and a second dye ink having a color tone different from that of the first dye ink, wherein at least one of the first and second dye inks is the above ink. An ink set comprises dye inks of yellow, magenta and cyan, wherein the dye inks comprise an ethylene oxide adduct of acetylene glycol resp., and the dye inks of magenta and cyan further comprise a silicon-containing surfactant.

IC ICM C09D011-00

CC 42-12 (Coatings, Inks, and Related Products)

IT Polysiloxanes, uses

(FZ-2162; ink, ink set, ink-jet recording process, ink cartridge, recording unit and ink-jet recording apparatus)

IT Polyurethanes, uses

(cartridge; ink, ink set, ink-jet recording process, ink cartridge, recording unit and ink-jet recording apparatus)

IT Polysiloxanes, uses

(di-Me, 3-hydroxypropyl Me, ethers with polyethylene-polypropylene glycol mono-Bu ether, L-720; ink, ink set, ink-jet recording process, ink cartridge, recording unit and ink-jet recording apparatus)

IT Dyes

Ink-jet printers
 (ink, ink set, ink-jet recording process, ink
 cartridge, recording unit and ink-jet

recording apparatus)

IT Inks

(jet-printing; ink, ink set, ink-jet recording process, ink cartridge, recording unit and ink-jet recording apparatus)

IT Polysiloxanes, uses

(polyoxyalkylene-, FZ-2123; ink, ink set, ink-jet recording process, ink cartridge, recording unit and ink-jet recording apparatus)

IT Polyoxyalkylenes, uses

(polysiloxane-, FZ-2123; ink, ink set, ink-jet recording process, ink cartridge, recording unit and ink-jet recording apparatus)

IT Surfactants

(silicon-containing; ink, ink set, ink-jet recording process, ink cartridge, recording unit and ink-jet recording apparatus)

IT 9003-07-0, Polypropylene 9003-20-7, Polyvinyl acetate

9004-34-6, Cellulose, uses

(cartridge; ink, ink set, ink-jet recording process,

ink cartridge, recording unit and ink-jet

recording apparatus)

9014-85-1, Acetylenol EH 12222-04-7, C.I. Direct Blue 199 IT 27306-78-1, Silwet L-77 50925-42-3, C.I. Direct Yellow 86

(ink, ink set, ink-jet recording process, ink

cartridge, recording unit and ink-jet recording apparatus)

REFERENCE COUNT: THERE ARE 6 CITED REFERENCES AVAILABLE 6

FOR THIS RECORD. ALL CITATIONS

AVAILABLE

IN THE RE FORMAT

L37 ANSWER 16 OF 38 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2001:565158 HCAPLUS

DOCUMENT NUMBER: 135:154154

TITLE: Lubricating acrylic polysiloxane coating

agents

INVENTOR(S): Kamiya, Daisuke; Maeda, Keiji; Okazaki,

Eiichi

PATENT ASSIGNEE(S): Toagosei Co., Ltd., Japan

SOURCE: PCT Int. Appl., 27 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

-----

DATE PATENT NO. KIND APPLICATION NO.

DATE

WO 2001055272 A1 20010802 WO 2001-JP350

2001

0119

W: CN, KR, US

RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU,

MC, NL, PT, SE, TR

JP 2001279165 A2 20011010 JP 2000-149335

2000

0522

PRIORITY APPLN. INFO.:

JP 2000-15140

2000

0125

JP 2000-149335

Α

2000

0522

Title agents, useful as antisticking backings of thermal-transfer recording films, are polymers consisting of silicone units 0.5-60, cyclic imido units 5-99, and other monomer-based units 0.5-94.5%. A MEK solution containing 30:40:30 Me methacrylate-tetrahydrophthalimidoethyl acrylate-X 22 174DX copolymer was spread on a polyester film and UV-cured to form a film showing dynamic friction 0.030  $\mu k$  and releasing ability 19 N/m and resulting good prints in thermal-transfer printing.

IT 352239-21-5P

(imido acrylate polysiloxane coatings as antisticking backings for thermal-transfer **recording** films)

RN 352239-21-5 HCAPLUS

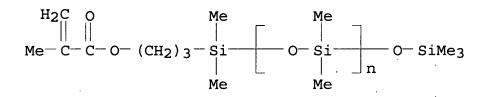
CN 2-Propenoic acid, 2-methyl-, polymer with α-[dimethyl[3-[(2-methyl-1-oxo-2-propenyl)oxy]propyl]silyl]-ω[(trimethylsilyl)oxy]poly[oxy(dimethylsilylene)],
2-(1,3,4,5,6,7-hexahydro-1,3-dioxo-2H-isoindol-2-yl)ethyl
2-propenoate, methyl 2-methyl-2-propenoate and oxiranylmethyl
2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 125350-99-4 CMF C13 H15 N O4

$$\begin{array}{c|c}
 & O \\
 & O \\$$

CRN 123109-42-2 CMF (C2 H6 O Si)n C12 H26 O3 Si2 CCI PMS



CM 3

CRN 106-91-2 CMF C7 H10 O3

$$\begin{array}{c|c} \mathsf{O} & \mathsf{O} & \mathsf{CH_2} \\ & \parallel & \parallel \\ \mathsf{CH_2} - \mathsf{O} - \mathsf{C} - \mathsf{C} - \mathsf{Me} \end{array}$$

CM 4

CRN 80-62-6 CMF C5 H8 O2

$$\begin{array}{ccc} ^{\text{H}_2\text{C}} & \text{O} \\ & || & || \\ \text{Me-C-C-OMe} \end{array}$$

CM 5

CRN 79-41-4 CMF C4 H6 O2 CH<sub>2</sub> || Me- C- CO<sub>2</sub>H

IC C09D183-04; C09D135-00; C09D133-06; C09D004-06; B41M005-40

CC 42-10 (Coatings, Inks, and Related Products)

Section cross-reference(s): 74

IT Polysiloxanes, uses

(acrylic; imido acrylate polysiloxane coatings as antisticking backings for thermal-transfer **recording** films)

IT Coating materials

(blocking-resistant; imido acrylate polysiloxane coatings as antisticking backings for thermal-transfer **recording** films)

IT Thermal-transfer printing materials

(sheets; imido acrylate polysiloxane coatings as antisticking backings for thermal-transfer recording films)

IT 352239-18-0P 352239-19-1P 352239-20-4P **352239-21-5P** 

352270-56-5P

(imido acrylate polysiloxane coatings as antisticking backings for thermal-transfer **recording** films)

REFERENCE COUNT:

12 THERE ARE 12 CITED REFERENCES AVAILABLE

FOR THIS RECORD. ALL CITATIONS

AVAILABLE

IN THE RE FORMAT

L37 ANSWER 17 OF 38 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER:

2001:189208 HCAPLUS

DOCUMENT NUMBER:

INVENTOR(S):

134:214917

TITLE:

Removing agent composition for photoresist Paek, Chiheun; Oh, Changi; Lee, Sangdae; Jin,

Yuanlai; Liu, Zhongshun

PATENT ASSIGNEE(S):

Tongjin Chemical Industry Co., Ltd., S. Korea

SOURCE:

Faming Zhuanli Shenging Gongkai Shuomingshu,

32 pp.

CODEN: CNXXEV

DOCUMENT TYPE:

Patent

LANGUAGE:

Chinese

FAMILY ACC. NUM. COUNT:

**VI.** 

PATENT INFORMATION:

PATENT NO.

KIND DATE

APPLICATION NO.

DATE

\_\_\_\_\_\_\_

```
CN 1258730
                         Α
                               20000705 CN 1999-118360
1999
0830
     CN 1118003
                         В
                                20030813
     KR 2000046480
                        Α
                                20000725 KR 1998-63166
1998
1231
    TW 575782
                        В
                               20040211
                                          TW 1999-88113365
1999
0805
                       Α
                               20001031 US 1999-435569
    US 6140027
1999
1108
PRIORITY APPLN. INFO.:
                                           KR 1998-63166
1998
1231
AΒ
    This patent disclosed a photoresist removing agent composition
     comprising: (1) 10-40 weight% water-soluble amine compound, (2)
20-50 weight%
    polar organic solvent selected from DMSO, N-methylpyrrolidone
(NMP),
    di-Me acetamide (DMA), DMF and
    di-Me imidazolidinone (DMI), (3) 10-30 weight%
    water, (4) 0.1-10 weight% polyhydroxy phenol compound, (5)
0.1-10%
    triazole compound, and (6) 0.01-1 weight% polysiloxane
            The
surfactant.
    composition can easily remove photoresist layer with min.
corrosion on
    metal substrate.
IC
    ICM C11D001-82
    ICS C11D003-32; H05K003-26
    74-5 (Radiation Chemistry, Photochemistry, and
CC
    Photographic and Other Reprographic Processes)
    Section cross-reference(s): 76
    Polysiloxanes, uses
IT
```

```
(di-Me, 3-hydroxypropyl Me, ethers with
        polyethylene-polypropylene glycol
        mono-Bu ether, L 720; surfactant in photoresist removing agent
        composition)
IT
     Polysiloxanes, uses
        (di-Me, 3-hydroxypropyl Me, ethoxylated
        propoxylated, L 7230; surfactant in photoresist removing agent
        composition)
     Polyoxyalkylenes, uses
IT
        (di-Me, Me hydrogen polysiloxane
        -, L 7600; surfactant in photoresist removing agent
composition)
IT
     Polysiloxanes, uses
        (di-Me, Me hydrogen,
        polyoxyalkylene-, L 7600; surfactant in photoresist
        removing agent composition)
     Polysiloxanes, uses
IT
        (di-Me, hydroxypropyl Me, ethers with
        polyoxyalkylene glycol mono-C1-3-alkyl ether, L 7604;
        surfactant in photoresist removing agent composition)
IT
     Polysiloxanes, uses
        (ethoxylated, L 7614; surfactant in photoresist removing agent
        composition)
     67-68-5, DMSO, uses 68-12-2, DMF, uses 80-73-9
IT
     872-50-4, NMP, uses
         (polar solvent in photoresist removing agent composition).
L37 ANSWER 18 OF 38 HCAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER:
                         2000:511793 HCAPLUS
DOCUMENT NUMBER:
                         133:142575
TITLE:
                         Developer for electrophotographic development
                         and ink-jet printing and
                         recording material such as ink
                         therefor
                         Tsubushi, Kazuo; Asami, Takeshi; Ishikawa,
INVENTOR(S):
                         Aiko
                       Ricoh Co., Ltd., Japan
PATENT ASSIGNEE(S):
SOURCE:
                         Jpn. Kokai Tokkyo Koho, 14 pp.
                         CODEN: JKXXAF
DOCUMENT TYPE:
                         Patent
LANGUAGE:
                         Japanese
FAMILY ACC. NUM. COUNT:
PATENT INFORMATION:
     PATENT NO.
                         KIND
                                DATE
                                          APPLICATION NO.
DATE
```

	JP 2000206738	A2	20000728	JP	1999-3488	
1999						
0108	US 2002081515	A1	20020627	US	2001-943448	
2001						
0830	US 2003065064	A1	20030403	US	2002-170910	
2002						
0612	US 6620569 US 2004010075		20030916 20040115	US	2003-613544	
2003						
0702 PRIO	RITY APPLN. INFO.:			JP	1999-3488	A
1999						
0108						
	•		•	US	1999-472575	B1
1999						
1227	f			110	2001-943448	B1
2001				US	2001-943446	DI.
0830						
				US	2002-170910	<b>A</b> 3
2002						
0612						

USHA SHRESTHA EIC 1700 REM 4B28

The invention relates to a developer used in electrophotog.

AB

development or in ink-jet printing has a
 toner, which contains a colorant and a resin, or ink in
 an insulative carrier solution, wherein the developer contains a
 reactive silicone compound The addition of the silicone
compound enables

the developer suitable for use with a high-b.p. carrier solution 157723-26-7, FM 0511

(FM 0511; developer for electrophotog. development and ink-jet printing and recording
material such as ink)

RN 157723-26-7 HCAPLUS

CN Poly[oxy(dimethylsilylene)],  $\alpha$ -[dimethyl[3-(oxiranylmethoxy)propyl]silyl]- $\omega$ -[(trimethylsilyl)oxy]-(9CI) (CA INDEX NAME)

IC ICM G03G009-12

ICS C09D011-00; G03G009-13

CC 74-3 (Radiation Chemistry, **Photochemistry**, and **Photographic** and Other Reprographic Processes)

ST developer electrophotog ink jet printing

IT Polysiloxanes, uses

(developer for electrophotog. development and inkjet printing)

IT Electrophotographic developers

(developer for electrophotog. development and inkjet printing and recording material such as ink)

IT Polysiloxanes, uses

(di-Me, di-Ph, [(ethenyldimethylsilyl)oxy]-terminated, FP

2231;

developer for electrophotog. development and inkjet printing and recording material such as ink)

IT Polysiloxanes, uses

(methacrylate-, X 22-5502; developer for electrophotog. development and ink-jet printing and recording material such as ink)

IT **157723-26-7**, FM 0511

(FM 0511; developer for electrophotog. development and

ink-jet printing and recording
 material such as ink)
IT 115254-29-0, FM 1111
 (FM 1111; developer for electrons)

(FM 1111; developer for electrophotog. development and ink-jet printing and recording

material such as ink)

IT 26403-67-8, KF 99 42557-10-8, KF 96-100 156048-34-9D, ethenyldimethylsilyl terminated 156327-07-0, FM 4421 (developer for electrophotog. development and ink-jet printing and recording material such as ink)

L37 ANSWER 19 OF 38 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER:

2000:312492 HCAPLUS

DOCUMENT NUMBER:

133:51072

TITLE:

Epoxy Resin-Photopolymer Composites for

Volume

Holography

AUTHOR(S):

Trentler, Timothy J.; Boyd, Joel E.; Colvin,

Vicki L.

CORPORATE SOURCE:

Department of Chemistry, Rice University,

Houston, TX, 77005, USA

SOURCE:

Chemistry of Materials (2000), 12(5),

1431-1438

CODEN: CMATEX; ISSN: 0897-4756

PUBLISHER:

American Chemical Society

DOCUMENT TYPE:

Journal

LANGUAGE:

English

AB Efficient materials for recording volume holograms are

described that could potentially find application in archival data

storage. These materials are prepared by mixing photopolymerizable

vinyl monomers with a liquid epoxy resin and an amine hardener.

solid matrix is formed in situ as the epoxy cures at room temperature

The unreacted vinyl monomers are subsequently photopolymd. during hologram recording. A key feature of these materials is

the separation of the epoxy and vinyl polymns. This separation allows for a

large index contrast to be developed in holograms when components are optimized. The standard material described in this work consists

of a low index matrix (n equivalent 1.46), comprised of diethylenetriamine and 1,4-butanediol diglycidyl ether, and a high

index photopolymer mixture (n equivalent 1.60) of N-vinylcarbazole and

N-vinyl-2-pyrrolidinone. This material is functional in thick formats (several millimeters), which enables narrow angular bandwidth and high diffraction efficiency. A dynamic range (M/#) up to 13 has been measured in these materials. Holog.

performance

is highly dependent on the amount of amine hardener used, as well as

on photopolymer shrinkage.

IT 130167-23-6

(holog. recording material mixture containing photopolymerizable vinyl monomers and epoxy resin matrix produced by curing composition containing)

RN 130167-23-6 HCAPLUS

CC 74-8 (Radiation Chemistry, **Photochemistry**, and **Photographic** and Other Reprographic Processes)

ST holog recording material epoxy resin photopolymerizable monomer composite; vinyl photopolymerizable monomer epoxy resin matrix holog recording

IT Polyamines

Polyamines

Polyamines

(epoxy-polyether-; holog. recording material containing photopolymerizable vinyl monomers and epoxy resin matrix)

IT Holographic recording materials

(holog. recording material containing photopolymerizable vinyl monomers and epoxy resin matrix)

IT Polymerization

(photopolymn.; holog. recording material containing photopolymerizable vinyl monomers and epoxy resin matrix)

IT Polyethers, uses

Polyethers, uses

Polyethers, uses

(polyamine-epoxy-; holog. recording material containing

```
photopolymerizable vinyl monomers and epoxy resin matrix)
IT
     Epoxy resins, uses
     Epoxy resins, uses
     Epoxy resins, uses
        (polyamine-polyether-; holog. recording material
        containing photopolymerizable vinyl monomers and epoxy resin
        matrix)
     30112-03-9, N-Vinylcarbazole-N-Vinyl-2-pyrrolidinone copolymer
IT
        (holog. recording in material containing
        photopolymerizable vinyl monomers and epoxy resin matrix)
     75-91-2, Tert-Butylhydroperoxide
IT
        (holog. recording in material containing
        photopolymerizable vinyl monomers and epoxy resin matrix)
     88-12-0, N-Vinyl-2-pyrrolidinone, reactions 1484-13-5,
IT
     N-Vinvlcarbazole
        (holog. recording material containing photopolymerizable
        vinyl monomers and epoxy resin matrix)
     78811-10-6, 1,4-Butanediol diglycidyl ether-diethylenetriamine
IT
                153972-09-9, Bis (4-qlycidyloxyphenyl) methane-m-
     copolymer
                               238752-94-8, 1,2,7,8-Diepoxyoctane-
     xylenediamine copolymer
     diethylenetriamine copolymer
        (holog. recording material containing photopolymerizable
        vinyl monomers and epoxy resin matrix)
IT
     111-40-0, Diethylenetriamine
                                   1477-55-0, m-Xylylenediamine
     2095-03-6, Bis (4-glycidyloxyphenyl) methane 2425-79-8,
     1,4-Butanediol diglycidyl ether 2426-07-5,
1,2,7,8-Diepoxyoctane
     130167-23-6
        (holog. recording material mixture containing
        photopolymerizable vinyl monomers and epoxy resin matrix
        produced by curing composition containing)
     125051-32-3, Irgacure 784
IT
        (photoinitiator; holog. recording in material containing
        photopolymerizable vinyl monomers and epoxy resin matrix)
                               THERE ARE 47 CITED REFERENCES AVAILABLE
REFERENCE COUNT:
                         47
                               FOR THIS RECORD. ALL CITATIONS
AVAILABLE
                               IN THE RE FORMAT
L37
    ANSWER 20 OF 38 HCAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER:
                         1999:679933 HCAPLUS
DOCUMENT NUMBER:
                         131:315851
TITLE:
                         Recording material for aqueous
                         ink and its manufacture
                         Kuwahara, Shoji; Yoshikawa, Takeshi;
INVENTOR(S):
Nakagami,
```

Yoshiaki

PATENT ASSIGNEE(S):

Toyo Ink Mfg. Co., Ltd., Japan

SOURCE:

LANGUAGE:

Jpn. Kokai Tokkyo Koho, 11 pp.

CODEN: JKXXAF

DOCUMENT TYPE:

Patent Japanese

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.

KIND DATE APPLICATION NO.

DATE

-----

JP 11291613 A2 19991026 JP 1998-100728

1998

0413

PRIORITY APPLN. INFO.:

JP 1998-100728

1998

0413

AB The title recording material comprises an ink

-receiving layer formed on at least one side of a support, wherein

the **ink**-receiving layer has microvoids on the surface and contains a water-absorbing polyurethane-polyurea 60.0-99.9

and

dimethylpolysiloxane-modified acrylic resin 0.1-40.0%. The process comprises drying the <code>ink-receiving</code> layer at 50-150° after applying a coating material to form the <code>ink-receiving</code> layer on the support. The recoring material evaluated by using <code>ink-jet</code> printing and gravure printing methods provided sharp images and waterfastness.

IT 247240-90-0

(ink-receiving layer of recording material
for aqueous ink)

RN 247240-90-0 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, polymer with 3-

(diethoxymethylsilyl)propyl 2-methyl-2-propenoate,

 $\alpha$ -[dimethyl[3-[(2-methyl-1-oxo-2-propenyl)oxy]propyl]silyl]-

 $\omega$ -[[dimethyl[3-[(2-methyl-1-oxo-2-

propenyl)oxy]propyl]silyl]oxy]poly[oxy(dimethylsilylene)], ethyl
2-propenoate and oxiranylmethyl 2-methyl-2-propenoate (9CI) (CA
INDEX NAME)

CM 1

CRN 65100-04-1 CMF C12 H24 O4 Si

$$^{\rm H_2C}$$
 O OEt  $_{\rm ||}$  ||  $_{\rm ||}$  Me- C- C- O- (CH2)  $_{\rm 3}-$  Si- Me OEt

CM 2

CRN 58130-03-3

CMF (C2 H6 O Si)n C18 H34 O5 Si2

CCI PMS

CM 3

CRN 140-88-5 CMF C5 H8 O2

CRN 106-91-2 CMF C7 H10 O3

$$\begin{array}{c|c} O & O & CH_2 \\ & \parallel & \parallel \\ CH_2 - O - C - C - Me \end{array}$$

CM 5

CRN 79-41-4 CMF C4 H6 O2

$$\begin{array}{c} \text{CH}_2 \\ || \\ \text{Me-} \text{C-} \text{CO}_2 \text{H} \end{array}$$

IC ICM B41M005-00

CC 74-6 (Radiation Chemistry, **Photochemistry**, and **Photographic** and Other Reprographic Processes) Section cross-reference(s): 37, 42

ST polyurethane polyurea aq ink recording material drying process

IT Gravure printing

Ink-jet printing

(ink-receiving layer of recording material
for aqueous ink)

IT Drying

(manufacture of ink-receiving layer of recording
material for aqueous ink)

IT Polyurethanes, uses

(polyurea-; ink-receiving layer of recording material for aqueous ink)

IT Polyureas

(polyurethane-; ink-receiving layer of
recording material for aqueous ink)

IT 26300-51-6, Acrylic acid-butyl acrylate-methyl methacrylate copolymer **247240-90-0** 247240-92-2 247240-94-4 247240-96-6 247240-98-8

(ink-receiving layer of recording material
for aqueous ink)

IT 201858-42-6P 201933-27-9P 247240-88-6P (ink-receiving layer of recording material

## for aqueous ink)

L37 ANSWER 21 OF 38 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER:

PATENT ASSIGNEE(S):

1999:648833 HCAPLUS

DOCUMENT NUMBER:

131:279296

TITLE:

UV-curable resins, their compositions, and

solder photoresist inks thereof

INVENTOR(S):

Marusawa, Takashi; Hashimoto, Soichi Gooh Chemical Industry Co., Ltd., Japan

SOURCE:

Jpn. Kokai Tokkyo Koho, 15 pp.

CODEN: JKXXAF

DOCUMENT TYPE:

Patent

1

LANGUAGE:

Japanese

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

DATE	PATENT NO.	KIND	DATE	APPLICATION NO.
	JP 11279243	<b>A</b> 2	19991012	JP 1998-87036

1998

0331

PRIORITY APPLN. INFO.:

JP 1998-87036

1998

0331

AB The UV-curable resins have ≥2 ethylenically unsatd. groups, CO2H, and Si and are prepared (i) by reacting HO2C-containing ethylenically unsatd. monomers and (un)saturated polybasic acid anhydrides with copolymers comprising Si-containing ethylenically unsatd. monomers and epoxy-containing ethylenically unsatd.

monomers

or (ii) by reacting epoxy-containing ethylenically unsatd. monomers

with copolymers comprising Si-containing ethylenically unsatd. monomers and HO2C-containing ethylenically unsatd. monomers. The compns. contain the UV-curable resins and compds. with ≥2 epoxy groups. The solder photoresist inks contain the compns., photopolymn. initiators, and diluents. The inks can be developed using dilute alkali solns. and give solder

resists

having excellent resistance to solvents, acids, Ag plating, and

electrolytic corrosion.

245727-49-5P, Acrylic acid-glycidyl methacrylate-1-(3methacryloxypropyl)polydimethylsiloxane-methyl
methacrylate-tetrahydrophthalic anhydride copolymer
245727-51-9P, Acrylic acid-glycidyl methacrylate-1-(3methacryloxypropyl)polydimethylsiloxane-methyl
methacrylate-N-phenylmaleimide copolymer

(UV-curable silicon-containing acrylic polymers, their compns., and  $% \left( \frac{1}{2}\right) =\left( \frac{1}{2}\right) ^{2}$ 

solder photoresist inks thereof)

RN 245727-49-5 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with  $\alpha$ -[dimethyl[3-[(2-methyl-1-oxo-2-propenyl)oxy]propyl]silyl]- $\omega$ -[(trimethylsilyl)oxy]poly[oxy(dimethylsilylene)], oxiranylmethyl 2-methyl-2-propenoate, 2-propenoic acid and 3a,4,7,7a-tetrahydro-1,3-isobenzofurandione (9CI) (CA INDEX NAME)

CM 1

CRN 123109-42-2

CMF (C2 H6 O Si)n C12 H26 O3 Si2

CCI PMS

CM 2

CRN 106-91-2 CMF C7 H10 O3

$$\begin{array}{c|c} \mathsf{O} & \mathsf{O} & \mathsf{CH}_2 \\ & \parallel & \parallel \\ \mathsf{CH}_2 - \mathsf{O} - \mathsf{C} - \mathsf{C} - \mathsf{Me} \end{array}$$

CRN 85-43-8 CMF C8 H8 O3

CM 4

CRN 80-62-6 CMF C5 H8 O2

$$\begin{array}{c|c} H_2C & O \\ \parallel & \parallel \\ Me-C-C-OMe \end{array}$$

CM 5

CRN 79-10-7 CMF C3 H4 O2

RN 245727-51-9 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with α-[dimethyl[3-[(2-methyl-1-oxo-2-propenyl)oxy]propyl]silyl]-ω-[(trimethylsilyl)oxy]poly[oxy(dimethylsilylene)], oxiranylmethyl 2-methyl-2-propenoate, 1-phenyl-1H-pyrrole-2,5-dione and 2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 123109-42-2 CMF (C2 H6 O Si)n C12 H26 O3 Si2 CCI PMS

CM 2

CRN . 941-69-5 CMF C10 H7 N O2

CM 3

CRN 106-91-2 CMF C7 H10 O3

$$\begin{array}{c|c} \mathsf{O} & \mathsf{O} & \mathsf{CH_2} \\ & \parallel & \parallel \\ \mathsf{CH_2} - \mathsf{O} - \mathsf{C} - \mathsf{C} - \mathsf{Me} \end{array}$$

CM 4

CRN 80-62-6 CMF C5 H8 O2

$$\begin{array}{ccc} ^{H_2C} & \text{O} \\ & || & || \\ \text{Me-} & \text{C-} & \text{C-} & \text{OMe} \end{array}$$

CM

5

```
CRN 79-10-7
     CMF
          C3 H4 O2
HO-C-CH=CH_2
IC
     ICM C08F299-00
          C08F002-48; C08F290-04; C09D011-10; G03F007-027;
G03F007-038;
          G03F007-075; H05K003-28; C09D004-00
CC
     74-5 (Radiation Chemistry, Photochemistry, and
     Photographic and Other Reprographic Processes)
     Section cross-reference(s): 37, 38
IT
     Epoxy resins, uses
        (UV-curable silicon-containing acrylic polymers, their
compns., and
        solder photoresist inks thereof)
IT
     Polysiloxanes, preparation
        (acrylic; UV-curable silicon-containing acrylic polymers,
their
        compns., and solder photoresist inks thereof)
IT
     Solder resists
     Solder resists
        (photoresists; UV-curable silicon-containing acrylic polymers,
        their compns., and solder photoresist inks thereof)
IT
     Photoresists
     Photoresists
        (solder; UV-curable silicon-containing acrylic polymers, their
        compns., and solder photoresist inks thereof)
IT
     245727-49-5P, Acrylic acid-qlycidyl methacrylate-1-(3-
     methacryloxypropyl) polydimethylsiloxane-methyl
     methacrylate-tetrahydrophthalic anhydride copolymer
     245727-50-8P, Acrylic acid-glycidyl methacrylate-methyl
     methacrylate-tetrahydrophthalic anhydride-trimethylsilylmethyl
     methacrylate copolymer 245727-51-9P, Acrylic
     acid-qlycidyl
methacrylate-1-(3-methacryloxypropyl)polydimethylsil
     oxane-methyl methacrylate-N-phenylmaleimide copolymer
        (UV-curable silicon-containing acrylic polymers, their
compns., and
```

solder photoresist inks thereof)

IT 28825-96-9, TEPIC 29570-58-9 71868-10-5, Irgacure 907

87912-85-4, Epiclon N 680 89118-70-7, YX 4000

(UV-curable silicon-containing acrylic polymers, their compns., and

solder photoresist inks thereof)

L37 ANSWER 22 OF 38 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER:

1999:648633 HCAPLUS

DOCUMENT NUMBER:

131:264821

TITLE:

Adhesive printing paper with metallic luster

INVENTOR(S):

Iguchi, Yuji; Nakajima, Toshimitsu Mitsubishi Paper Mills, Ltd., Japan

PATENT ASSIGNEE(S):

SOURCE:

Jpn. Kokai Tokkyo Koho, 11 pp.

CODEN: JKXXAF

DOCUMENT TYPE: LANGUAGE:

Patent Japanese

1

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

DATE	PATENT NO.	KIND	DATE	APPLICATION NO.
	JP 11277890	<b>A</b> 2	19991012	JP 1998-87423

1998

0331

PRIORITY APPLN. INFO.:

JP 1998-87423

1998

0331

AB The printing paper comprises on 1 side of a support an adhesive resin layer, a metal foil layer, and an ink receptor layer, and on

the other side of the support a hot-melt adhesive layer. The hot-melt adhesive layer may contain a surfactant and water-soluble

thermoplastics. A heat-insulator layer may be interposed between the support and the hot-melt adhesive layer. The printing paper can be adhered onto a postcard with a hot iron.

IC ICM B41M005-00

ICS B41M005-40; B41M005-38; G09F003-02

CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 38, 43

IT Polyoxyalkylenes, uses

(PEO 1, surfactant; adhesive printing paper with metallic luster for making printed postcard)

IT Polysiloxanes, uses

(di-Me, 3-hydroxypropyl Me, ethers with

polyethylene-polypropylene glycol

mono-Me ether, Silwet L 7001, surfactant; adhesive printing paper with metallic luster for making printed postcard)

IT Ink-jet recording sheets

Thermal-transfer printing materials

(paper; adhesive printing paper with metallic luster for making

printed postcard)

L37 ANSWER 23 OF 38 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER:

1997:701440 HCAPLUS

DOCUMENT NUMBER:

128:28565

TITLE:

Nonagglomerating antifoamant for silver

halide

photographic emulsions

INVENTOR(S):

Orem, Michael William; Daubendiek, Richard

Lee; Oehlbeck, Douglas Lee; Lighthouse,

Joseph

George

PATENT ASSIGNEE(S):

Eastman Kodak Co., USA

SOURCE:

U.S., 5 pp. CODEN: USXXAM

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

. 1

PATENT INFORMATION:

DATE	PATENT NO.	KIND	DATE	APPLICATION NO.
		_	10071000	**** 1006 504611
	US 5681692	A	19971028	US 1996-594611

1996

0202

PRIORITY APPLN. INFO.:

US 1996-594611

1996

0202

```
The invention relates to a solution for forming silver halide
AB
     emulsions comprising water, gelatin containing less than 30
µmol of
     methionine per q of gelatin, and at least one antifoamant
selected
     from the group consisting of RCO2(CH2CH2O)xOCR wherein RC and CR
     represent the carbon chains in carboxylic acids with chain
lengths
     of predominantly 12-18 carbon atoms and x has a mean value of 4
to
     5 from a mixture with a distribution of values between 2 and 7
and
     (H3CSi)[(OSi(CH3)2)dO(CH2CH2CH2O)n C4H9]3 wherein the mol.
weight is
     2500 to 3500 and d and n have average values of less than 15.
IC
     ICM G03C001-043
     ICS
          B01D019-04
     430569000
NCL
    74-2 (Radiation Chemistry, Photochemistry, and
     Photographic and Other Reprographic Processes)
IT
     Polyoxyalkylenes, uses
        (di-Me, Me hydrogen polysiloxane
        -, Silwet L-720; antifoamant for silver halide photog.
        emulsions)
IT
     Polysiloxanes, uses
        (di-Me, Me hydrogen,
        polyoxyalkylene-, Silwet L-720; antifoamant for silver
        halide photog. emulsions)
IT
     Polysiloxanes, uses
        (di-Me, [(methylsilylidyne)tris(oxy)]tris-,
        hydroxy-terminated, ethers with polyethylene-
        polypropylene glycol monoalkyl ether, Silwet
        L-722; antifoamant for silver halide photog. emulsions)
IT
     Polysiloxanes, uses
        (di-Me, modified; antifoamants for silver
        halide photog. emulsions)
IT
     Polyoxyalkylenes, uses
        (tall-oil fatty acid ester derivs.; antifoamant for silver
        halide photog. emulsions)
    ANSWER 24 OF 38 HCAPLUS COPYRIGHT 2005 ACS on STN
                         1997:421082 HCAPLUS
ACCESSION NUMBER:
DOCUMENT NUMBER:
                         127:57972
TITLE:
                         Electrophotographic image formation
INVENTOR(S):
                         Kato, Eiichi
PATENT ASSIGNEE(S):
                         Fuji Photo Film Co., Ltd., Japan
```

SOURCE:

Jpn. Kokai Tokkyo Koho, 42 pp.

CODEN: JKXXAF

DOCUMENT TYPE:

Patent

LANGUAGE:

Japanese

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

	PATENT NO.	KIND	DATE	APPLICATION NO.
DATE				
	JP 09106202	A2	19970422	JP 1996-208632
1996				
0807				
	US 5725981	Α	19980310	US 1996-692238

1996

0807

PRIORITY APPLN. INFO.:

JP 1995-222778

1995

0809

AB The title image formation uses a photoreceptor having 2 laminated peelable transfer layers to form an electrophotog. toner image and

then to thermally transfer the toner image to a recording material, wherein the 1st transfer layer is formed by electro-depositing thermoplastic resin particles containing 2 kinds of

specified resins with different softening point and glass transition point in 1 particle, and the 2nd transfer layer contains a different resin.

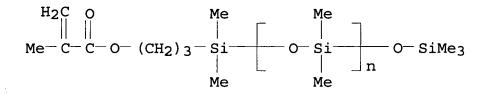
IT 190894-75-8 190894-78-1

> (used for increasing peeling ability of transfer layer for electrophotog. photoreceptor for image formation)

190894-75-8 HCAPLUS RN

2-Propenoic acid, 2-methyl-, ethyl ester, polymer with CN  $\alpha$ -[dimethyl[3-[(2-methyl-1-oxo-2-propenyl)oxy]propyl]silyl]- $\omega$ -[(trimethylsilyl)oxy]poly[oxy(dimethylsilylene)] and oxiranylmethyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CRN 123109-42-2 CMF (C2 H6 O Si)n C12 H26 O3 Si2 CCI PMS



CM 2

CRN 106-91-2 CMF C7 H10 O3

$$\begin{array}{c|c} \mathsf{O} & \mathsf{O} & \mathsf{CH}_2 \\ & \parallel & \parallel \\ \mathsf{CH}_2 - \mathsf{O} - \mathsf{C} - \mathsf{C} - \mathsf{Me} \end{array}$$

CM 3

CRN 97-63-2 CMF C6 H10 O2

$$\begin{array}{c|c} H_2C & O \\ \parallel & \parallel \\ Me^- C^- C^- OEt \end{array}$$

RN 190894-78-1 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with methyl 2-propenoate, oxiranylmethyl 2-propenoate and 3- (undecamethylpentasiloxanyl)propyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 107642-12-6 CMF C18 H44 O6 Si5

CM 2

CRN 106-90-1 CMF C6 H8 O3

CM 3

CRN 96-33-3 CMF C4 H6 O2

$$\begin{array}{c} \text{O} \\ || \\ \text{MeO-C-CH------} \text{CH-----} \end{array}$$

CRN 80-62-6 CMF C5 H8 O2

H<sub>2</sub>C 0 Me-C-C-OMe

IC ICM G03G015-16

ICS G03G007-00; G03G015-01

CC 74-3 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

Section cross-reference(s): 38

58258-12-1 162127-42-6 166594-75-8 **190894-75-8** IT 190894-76-9 190894-77-0D, reaction products with thioethyl

methacrylate 190894-78-1 190894-79-2 190894-81-6

(used for increasing peeling ability of transfer layer for electrophotog. photoreceptor for image formation)

L37 ANSWER 25 OF 38 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER:

1997:119283 HCAPLUS

DOCUMENT NUMBER:

126:132219

TITLE:

Fluorine-containing epoxy resin composition highly soluble in solvents for adhesives and photocurable soil-repellent hard coatings

with

good adhesion for ink-jet

heads

INVENTOR(S):

Imamura, Isao

PATENT ASSIGNEE(S):

Canon K. K., Japan

SOURCE:

PCT Int. Appl., 57 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

Japanese

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO.

DATE

A1 19961227 WO 1996-JP1606 WO 9641835

1996

0613

W:

US

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RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC,
             NL, PT, SE
     EP 779337
                          A1
                                 19970618
                                             EP 1996-917664
1996
0613
     EP 779337
                          B1
                                20011024
         R: DE, FR, GB, IT
     JP 10053639
                          A2
                                 19980224
                                             JP 1996-152366
1996
0613
     JP 3478669
                          B2
                                20031215
   US 2001008907
                                20010719 US 1997-776747
                          A1
1997
0404
     US 6291545
                          B2
                                20010918
PRIORITY APPLN. INFO.:
                                             JP 1995-146269
1995
0613
                                             JP 1996-140192
1996
0603
                                             WO 1996-JP1606
1996
0613
AB
     The title composition comprises 5-80% a polyfunctional epoxy
```

having ≥2 epoxy groups and being free from F or Si, 5-40% an epoxy compound having a perfluoro group at its terminal, and 5-80% a compound having ≥2 groups selected from epoxy, alc., carboxylate, amino and a mixture thereof together with F or Si.

An

adhesive for bonding alumite kettle lid and wood piece comprised Epikote 828 60, MF-120 10,

1,3-bis(glycidoxypropyl)tetramethyldisi

loxane 30, siloxane group-containing amine hardener LS7430 30, and

A-187 silane coupler 3 parts.

IT 186294-09-7P 186294-17-7P 186294-22-4P

186294-28-0P 186294-30-4P

(fluorine-containing epoxy resin composition highly soluble in solvents for

adhesives and photocurable soil-repellent hard coatings with good adhesion for ink-jet heads)

RN 186294-09-7 HCAPLUS

CN Phenol, 4,4'-(1-methylethylidene)bis-, polymer with (chloromethyl)oxirane, 1,1,3,3-tetramethyl-1,3-bis[3-(oxiranylmethoxy)propyl]disiloxane and

[[(3,3,4,4,5,5,6,6,7,7,8,8,8-tridecafluorooctyl)oxy]methyl]oxirane (9CI) (CA INDEX NAME)

CM 1

CRN 122193-68-4 CMF C11 H9 F13 O2

CM 2

CRN 126-80-7

CMF C16 H34 O5 Si2

CRN 106-89-8 CMF C3 H5 Cl O

CM 4

CRN 80-05-7 CMF C15 H16 O2

RN 186294-17-7 HCAPLUS

CN 1-Octanesulfonamide, 1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-heptadecafluoro-N-(oxiranylmethyl)-N-propyl-, polymer with 3-oxiranyl-7-oxabicyclo[4.1.0]heptane,  $\alpha,\alpha',\alpha'$ -tetrakis(trifluoromethyl)-1,4-benzenedimethanol and 1,1,3,3-tetramethyl-1,3-bis[3-(oxiranylmethoxy)propyl]disiloxane (9CI) (CA INDEX NAME)

CM 1

CRN 77620-64-5 CMF C14 H12 F17 N O3 S

$$\begin{array}{c}
O \\
O \\
S \\
CH_2 - N - Pr - n
\end{array}$$

CM 2

CRN 1992-15-0 CMF C12 H6 F12 O2

CM 3

CRN 126-80-7

CMF C16 H34 O5 Si2

CM 4

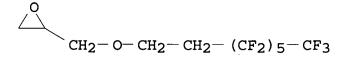
CRN 106-87-6 CMF C8 H12 O2

RN 186294-22-4 HCAPLUS

CN Disiloxane,

1,1,3,3-tetramethyl-1,3-bis[3-(oxiranylmethoxy)propyl], polymer with [[(3,3,4,4,5,5,6,6,7,7,8,8,8tridecafluorooctyl)oxy]methyl]oxirane (9CI) (CA INDEX NAME)

CRN 122193-68-4 CMF C11 H9 F13 O2



CM 2

CRN 126-80-7 CMF C16 H34 O5 Si2

RN 186294-28-0 HCAPLUS

CN 7-Oxabicyclo[4.1.0]heptane-3-carboxylic acid, 7-oxabicyclo[4.1.0]hept-3-ylmethyl ester, polymer with 1,1,3,3-tetramethyl-1,3-bis[3-(oxiranylmethoxy)propyl]disiloxane and

[[(3,3,4,4,5,5,6,6,7,7,8,8,8-tridecafluorooctyl)oxy]methyl]oxi rane (9CI) (CA INDEX NAME)

CM 1

CRN 122193-68-4 CMF C11 H9 F13 O2

$$_{\text{CH}_2-\text{O-CH}_2-\text{CH}_2-\text{(CF}_2)}^{\text{O}}_{5-\text{CF}_3}$$

CM 2

CRN 2386-87-0 CMF C14 H20 O4

CM 3

CRN 126-80-7

CMF C16 H34 O5 Si2

RN 186294-30-4 HCAPLUS

CN Phenol, 4,4'-(1-methylethylidene)bis-, polymer with Cefral Coat A 101B, (chloromethyl)oxirane and 1,1,3,3-tetramethyl-1,3-bis[3-(oxiranylmethoxy)propyl]disiloxane (9CI) (CA INDEX NAME)

CM 1

CRN 137802-09-6

CMF Unspecified

CCI PMS, MAN

## \*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

CM 2

CRN 126-80-7

CMF C16 H34 O5 Si2

O 
$$CH_2 - O - (CH_2)_3 - Si - O - Si - (CH_2)_3 - O - CH_2$$
Me Me Me Me

CRN 106-89-8 CMF C3 H5 Cl O

CM 4

CRN 80-05-7 CMF C15 H16 O2

IC ICM C08L063-00

ICS C08G059-20; C08G059-40; C09D163-00; C09J163-00; B41J002-05

CC 37-6 (Plastics Manufacture and Processing)

Section cross-reference(s): 74

ST epoxy compn fluorine contg adhesive; ink jet head epoxy resin; coating fluorine contg epoxy resin

IT Adhesives

Printing apparatus

Ships

(fluorine-containing epoxy resin composition highly soluble in solvents for

adhesives and photocurable soil-repellent hard coatings with good adhesion for ink-jet heads)

ITEpoxy resins, uses (fluorine-containing epoxy resin composition highly soluble in solvents for adhesives and photocurable soil-repellent hard coatings with good adhesion for ink-jet heads) Coating materials IT (for ships; fluorine-containing epoxy resin composition highly soluble in solvents for adhesives and photocurable soil-repellent hard coatings with good adhesion for ink-jet heads) 30603-97-5P **186294-09-7P** 186294-11-1P 186294-13-3P IT 186294-15-5P **186294-17-7P** 186294-20-2P **186294-22-4P** 186294-24-6P 186294-26-8P 186294-27-9P **186294-28-0P** 186294-29-1P **186294-30-4P** 186294-32-6P (fluorine-containing epoxy resin composition highly soluble in solvents for adhesives and photocurable soil-repellent hard coatings with good adhesion for ink-jet heads) L37 ANSWER 26 OF 38 HCAPLUS COPYRIGHT 2005 ACS on STN ACCESSION NUMBER: 1997:8913 HCAPLUS DOCUMENT NUMBER: 126:39656 TITLE: Electrostatographic toner particles comprising polysiloxane-modified resins INVENTOR(S): Tavernier, Serge; Marien, August; Op De Beeck, Werner PATENT ASSIGNEE(S): Agfa-Gevaert Naamloze Vennootschap, Belg. Eur. Pat. Appl., 23 pp. SOURCE: CODEN: EPXXDW DOCUMENT TYPE: Patent LANGUAGE: English FAMILY ACC. NUM. COUNT: PATENT INFORMATION: KIND DATE APPLICATION NO. PATENT NO. DATE

1996

EP 740217

0318

A1 19961030 EP 1996-200738

R: BE, DE, FR, GB, NL

toners)

130167-23-6 HCAPLUS

Poly[oxy(dimethylsilylene)],  $\alpha$ -[dimethyl[3-(oxiranylmethoxy)propyl]silyl]- $\omega$ -[[dimethyl[3-

RN

CN

```
US 5620825
                          Α
                                19970415
                                            US 1996-617327
1996
0318
                         A2
     JP 08297380
                                19961112 JP 1996-90453
1996
0319
     JP 3089206
                          B2
                                20000918
    US 5888657
                          Α
                                            US 1997-786022
                                19990330
1997
0121
PRIORITY APPLN. INFO.:
                                            EP 1995-200723
                                                                Α
1995
0323
                                            US 1996-617327
                                                                A3
1996
0318
AB
     There are provided dry electrostatog. toner particles wherein the
     toner resin comprises more than 10% by weight of one or more
    polysiloxane-modified resins. In these resins the polysiloxane
     moieties are attached to the other polymeric moieties of the
     copolymers over an ether group or an ester group. In a preferred
     embodiment the toner resin of the toner particles consists of one
     or more polysiloxane-modified resins.
ΙT
     130167-23-6
```

USHA SHRESTHA EIC 1700 REM 4B28

(oxiranylmethoxy)propyl]silyl]oxy] - (9CI) (CA INDEX NAME)

(reaction with linear polyesters for preparing electrostatog.

ICM G03G009-087 IC

74-3 (Radiation Chemistry, Photochemistry, and CC Photographic and Other Reprographic Processes)

ITRecording

(magneto-; toners containing polysiloxane-modified resins for)

IT 130167-23-6

> (reaction with linear polyesters for preparing electrostatog. toners)

L37 ANSWER 27 OF 38 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER:

1996:595883 HCAPLUS

DOCUMENT NUMBER:

125:234486

TITLE:

Photosensitive composition for volume

hologram

recording, recording medium

using the same and volume hologram formation

method

INVENTOR(S):

Sato, Masahiko; Mizutani, Kenzo; Kawabata,

Masami; Sumyoshi, Iwao

PATENT ASSIGNEE(S):

Nippon Paint Co Ltd, Japan

SOURCE:

Jpn. Kokai Tokkyo Koho, 16 pp.

CODEN: JKXXAF

DOCUMENT TYPE:

Patent

LANGUAGE:

Japanese

FAMILY ACC. NUM. COUNT:

1

PATENT INFORMATION:

	PATENT NO.	KIND	DATE	APPLICATION NO.
DATE				
	JP 081 <u>6</u> 0842	A2	19960621	JP 1995-254947
1995			a	
1002				
	JP 3532675	B2	20040531	
	US 5702846	A	19971230	US 1997-808546
1997				

0228

PRIORITY APPLN. INFO.:

JP 1994-238927

A1

1994

1003

US 1995-536103

В1

1995

0929

AB In the title composition comprising a cationic polymerizable compound, a

radical polymerizable compound, a cationic polymerization initiator and a

radical polymerization initiator, the cationic polymerizable compound

and/or the radical polymerizable compound contain siloxane linkage.

The radical polymerization initiator may contain a cyanine dye as a

sensitizer and a diaryl iodonium salt as an active radical generation compound The composition showed excellent light-resistance

and heat-resistance.

IT 31305-85-8, TSL 9906

(siloxane linkage-containing cationic polymerizable compound of

photosensitive composition for volume hologram recording)

RN 31305-85-8 HCAPLUS

CN Disiloxane,

1,1,3,3-tetramethyl-1,3-bis[3-(oxiranylmethoxy)propyl], homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 126-80-7

CMF C16 H34 O5 Si2

IC ICM G03H001-02

ICS C08G059-40; G02B001-04; G03F007-004; G03F007-027; G03F007-029; G03F007-075; G03H001-04; G03H001-28

CC 74-8 (Radiation Chemistry, **Photochemistry**, and **Photographic** and Other Reprographic Processes)

ST photosensitive compn vol hologram recording

IT Holography

(photosensitive composition for volume hologram recording, recording medium using the same and volume hologram formation method)

IT Recording materials

(holog., photosensitive composition for volume hologram recording, recording medium using the same and volume hologram formation method)

IT Holography

(recording materials, photosensitive composition for volume hologram recording, recording medium using the same and volume hologram formation method)

IT 17578-95-9 66003-76-7, Diphenyliodonium

trifluoromethanesulfonate

(radical polymerization initiator of photosensitive composition for volume

hologram recording)

IT 31305-85-8, TSL 9906 121225-97-6, XC 96B0370

(siloxane linkage-containing cationic polymerizable compound

photosensitive composition for volume hologram recording)

IT 18151-85-4, TSL 9705 18547-93-8, TSL 9706 178953-28-1, PS 2A (siloxane linkage-containing radical polymerizable compound of photosensitive composition for volume hologram recording)

L37 ANSWER 28 OF 38 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER:

1996:449206 HCAPLUS

DOCUMENT NUMBER:

125:100301

TITLE:

of

Photosensitive composition, volume hologram

recording material using it, hologram,

and its formation

INVENTOR(S):

Sato, Masahiko; Mizutani, Kenzo; Kawabata,

Masami; Sumyoshi, Iwao

PATENT ASSIGNEE(S):

Nippon Paint Co Ltd, Japan

SOURCE:

LANGUAGE:

Jpn. Kokai Tokkyo Koho, 11 pp.

CODEN: JKXXAF

DOCUMENT TYPE:

Patent Japanese

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

	PATENT NO.	KIND	DATE	APPLICATION NO.
DATE				
, .				
	JP 08101500	A2	19960416	JP 1994-238932
	DP 08101300	A2	19900410	UP 1994-236932
1994				
		•	•	
1003				
	JP 3532621	B2	20040531	ر. پر
PRIO	RITY APPLN. INFO.:			JP 1994-238932

1994

1003

AB The composition contains (A) a siloxane-containing polymer binder (B) a

radically polymerizable compound, (C) a cationic polymerizable compound, (D) a radical polymerization initiator, and (E) a cationic

polymerization initiator. The material has a **recording** layer obtained from the composition The title **recording** method involves the steps of (A) exposing the material to a laser or coherence interference pattern and (B) irradiating with UV light and/or visible light and/or (C) heating. The obtained hologram with good heat and light resistance is also claimed.

IT 31305-85-8P

recording material and formation of hologram)

RN 31305-85-8 HCAPLUS

CN Disiloxane,

CM 1

CRN 126-80-7

CMF C16 H34 O5 Si2

IC ICM G03F007-004

ICS G03F007-027; G03F007-029; G03F007-033; G03F007-075; G03F007-20; G03H001-04

CC 74-8 (Radiation Chemistry, Photochemistry, and

Photographic and Other Reprographic Processes)

Section cross-reference(s): 38

IT Dyes, cyanine

(sensitizer; siloxane-containing photosensitive composition for volume

hologram **recording** material and formation of hologram)

IT Holography

Photoimaging compositions and processes

Polymerization catalysts

(siloxane-containing photosensitive composition for volume hologram

recording material and formation of hologram)

IT Siloxanes and Silicones, uses

(siloxane-containing photosensitive composition for volume hologram

recording material and formation of hologram)

IT 66003-76-7, Diphenyliodonium trifluoromethanesulfonate 104558-94-3, UVI 6974 146297-31-6

(siloxane-containing photosensitive composition for volume hologram

recording material and formation of hologram)

IT 9051-49-4P, Pentaerythritol-propylene oxide copolymer

31305-85-8P 143410-64-4P 178953-29-2P 178953-32-7P

(siloxane-containing photosensitive composition for volume hologram

recording material and formation of hologram)

IT 178953-30-5, Ethyl acrylate-TSL 9705 copolymer

(siloxane-containing photosensitive composition for volume hologram

recording material and formation of hologram)

L37 ANSWER 29 OF 38 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER:

1996:280445 HCAPLUS

DOCUMENT NUMBER:

124:292552

TITLE:

Aqueous surface treating agents for plastic films for magnetic tapes or thermal-transfer

sheets

INVENTOR(S):

Iquchi, Yoshinori; Takahashi, Naohiro;

Kuwata,

Satoshi

PATENT ASSIGNEE(S):

Shinetsu Chemical Industry. Co., Ltd., Japan

SOURCE:

LANGUAGE:

Jpn. Kokai Tokkyo Koho, 7 pp.

CODEN: JKXXAF

DOCUMENT TYPE:

Patent Japanese

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

	PATENT NO.	KIND	DATE	APPLICATION NO.
DATE			•	
	JP 08045070	A2	19960216	JP 1994-182043
1994				

0803

JP 3481683 B2 20031222

PRIORITY APPLN. INFO.:

JP 1994-182043

1994

0803

Title agents, with good adhesion, comprise (A) aqueous dispersions of

branched non-fluidable silicones containing R12SiO2/2 and R1SiO3/2 (R1

= C1-20 hydrocarbyl), (B) aqueous dispersions of R2R3N(CH2)a[NR4(CH2)b]cSiR5(OR6)2(R2-R4 = H, C1-6 hydrocarbyl;R5, R6 = C1-6 hydrocarbyl; a, b = 1-6; c = 0-3) hydrolyzates, and (C) aqueous polyurethanes at an effective component of A/B/C of 9-90:0.1-40:9-90. An aqueous composition containing

49.4:0.6:50.0

octamethylcyclotetrasiloxane-phenyltriethoxysilane copolymer/3-aminopropylmethyldimethoxysilane/Elastron H 3 (reactive polyester-polyurethane) was applied on a PET film and baked to form a film showing dynamic friction coefficient 0.17 and good

soil resistance.

IT 170099-69-1

(aminosiloxane/polyurethane-containing aq coatings for plastic films for magnetic tapes or thermal-transfer sheets)

RN 170099-69-1 HCAPLUS

CN 1,2-Ethanediamine, N-[3-(dimethoxymethylsilyl)propyl]-, polymer with diethoxymethyl[3-(oxiranylmethoxy)propyl]silane, octamethylcyclotetrasiloxane and triethoxyphenylsilane (9CI) (CA INDEX NAME)

CM 1

CRN 3069-29-2 CMF C8 H22 N2 O2 Si

$$\begin{array}{c} \text{OMe} \\ \mid \\ \text{Me-Si-} \text{ (CH}_2\text{) }_3\text{--NH-CH}_2\text{--CH}_2\text{--NH}_2\\ \mid \\ \text{OMe} \end{array}$$

CM 2

CRN 2897-60-1 CMF C11 H24 O4 Si

$$\begin{array}{c} \text{O} & \text{OEt} \\ & | \\ \text{CH}_2\text{-O-(CH}_2)_3\text{-}\text{Si-Me} \\ & | \\ \text{OEt} \end{array}$$

CM 3

CRN 780-69-8 CMF C12 H20 O3 Si

CRN 556-67-2 CMF C8 H24 O4 Si4

IC ICM G11B005-84

ICS B41M005-40; C08K005-54; C08L075-04; C08L083-04; C09D175-04; C09D183-04

ICA B42D015-10

CC 42-10 (Coatings, Inks, and Related Products) Section cross-reference(s): 74, 77

IT Recording apparatus

(magnetic tapes, aminosiloxane/polyurethane-containing aq coatings

for plastic films for magnetic tapes or thermal-transfer sheets)

IT 118478-14-1, Superflex 110 170099-69-1

(aminosiloxane/polyurethane-containing aq coatings for plastic films for magnetic tapes or thermal-transfer sheets)

L37 ANSWER 30 OF 38 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER:

1995:849672 HCAPLUS

DOCUMENT NUMBER:

124:11046

TITLE:

Water-based crosslinked siloxane-vinyl

compound copolymer emulsions for coatings INVENTOR(S):

Noda, Itsupei; Ishikawa, Masami; Yamawaki,

Masaji

PATENT ASSIGNEE(S): Takemoto Oil & Fat Co Ltd, Japan

Jpn. Kokai Tokkyo Koho, 11 pp. SOURCE:

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

DATE	PATENT NO.	KIND	DATE	APPLICATION NO.
DAIL				
	JP 07196750	A2	19950801	JP 1993-355410

1993

1229

JP 3361593 B2 20030107

PRIORITY APPLN. INFO.: JP 1993-355410

1993

1229

The compns. comprise 90-99/1-10 mixts. of linear units comprising AB R1R2SiO, R3SiX1O (I), and/or R4Si(Z1Y1)O (II) and crosslinked units comprising R5SiO3/2, SiX2O3/2 (III), Si(Z2Y2)O3/2 (IV), and/or SiO2 [R1-R5 = radically nonpolymerizable hydrocarbyl; X1, X2 = radically nonpolymerizable epoxy-containing group-substituted

hydrocarbyl; Y1, Y2 = glycidyl (meth)acrylate-C1-4-alkyl (meth)acrylate (in 1-99:1-99 weight ratio) graft copolymd. segment;

Z1, Z2 = divalent organic linking group], in which I + III form 0.5-15 mol%, II + IV form 0.5-5 mol%, and Y1 + Y2 form 25-75 weight%.

The compns. are useful for magnetic recording materials, printing plates, photog. materials, etc., showing surface smoothness and affinity to inks or adhesives. 97.7 g octamethylcyclotetrasiloxane was polymerized with 4.7 g  $(\gamma$ -glycidoxypropyl)trimethoxysilane and 5.0 q (γ-methacryloyloxypropyl)trimethoxysilane, then further treated with 100 q 48:48:4 mixture of Et acrylate, Me

methacrylate,

and glycidyl methacrylate and K persulfate to give an aqueous emulsion, which was applied to a film to give a test piece showing

good peeling resistance.

IT 171609-55-5P

(aqueous emulsions of siloxane-acrylate graft copolymers for coatings)

RN 171609-55-5 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with dimethoxymethyl[2-(oxiranylmethoxy)ethyl]silane, ethyl 2-propenoate, octamethylcyclotetrasiloxane, oxiranylmethyl 2-methyl-2-propenoate, trimethoxymethylsilane and 3-(trimethoxysilyl)propyl 2-methyl-2-propenoate, graft (9CI) (CA INDEX NAME)

CM 1

CRN 171609-54-4 CMF C8 H18 O4 Si

$$\begin{array}{c|c} \text{OMe} & \text{OMe} \\ | \\ \text{CH}_2-\text{O}-\text{CH}_2-\text{CH}_2-\text{Si}-\text{Me} \\ | \\ \text{OMe} \end{array}$$

CM 2

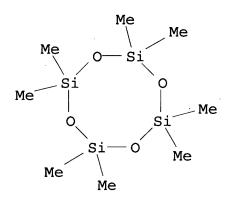
CRN 2530-85-0 CMF C10 H20 O5 Si

$$\begin{array}{c|c} ^{H_2C} & \text{O} & \text{OMe} \\ & || & || & | \\ \text{Me-C-C-O-(CH}_2)_3 - \text{Si-OMe} \\ & | & | \\ & \text{OMe} \end{array}$$

CM 3

CRN 1185-55-3 CMF C4 H12 O3 Si

CRN 556-67-2 CMF C8 H24 O4 Si4



CM 5

CRN 140-88-5 CMF C5 H8 O2

$$\begin{array}{c} \text{O} \\ || \\ \text{EtO-C-CH-----} \text{CH}_2 \end{array}$$

CM 6

CRN 106-91-2 CMF C7 H10 O3

$$\begin{array}{c|c} \mathsf{O} & \mathsf{O} & \mathsf{CH}_2 \\ & \parallel & \parallel \\ \mathsf{CH}_2 - \mathsf{O} - \mathsf{C} - \mathsf{C} - \mathsf{Me} \end{array}$$

CRN 80-62-6 CMF C5 H8 O2

$$\begin{array}{c|c} H_2C & O \\ & \parallel & \parallel \\ Me-C-C-OMe \end{array}$$

IC ICM C08F283-12

ICS C09D151-08

CC 42-7 (Coatings, Inks, and Related Products)

Section cross-reference(s): 74

IT 171609-52-2P 171609-53-3P **171609-55-5P** 171609-56-6P

171609-57-7P

(aqueous emulsions of siloxane-acrylate graft copolymers for coatings)

L37 ANSWER 31 OF 38 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER:

1995:689971 HCAPLUS

DOCUMENT NUMBER:

123:70486

TITLE:

Antistatic coating materials for

recording media

INVENTOR(S):

Kamyama, Kenichi

PATENT ASSIGNEE(S):

Kao Corp, Japan

SOURCE:

Jpn. Kokai Tokkyo Koho, 10 pp.

CODEN: JKXXAF

DOCUMENT TYPE:

Patent

2

LANGUAGE:

Japanese

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

DATE	PATENT NO.	KIND	DATE	APPLICATION NO.
	JP 07070555	A2	19950314	JP 1993-158388

1993

```
0629
     JP 3552060
                           B2
                                  20040811
     US 5534322
                           Α
                                  19960709
                                              US 1994-231749
1994
0425
PRIORITY APPLN. INFO.:
                                              JP 1993-158388
                                                                    Α
1993
0629
                                              JP 1994-55725
                                                                    Α
1994
0325
AB
     The title materials comprise (A) polymerizable compds. containing
     (meth) acryloyl groups, (B) reactive-functional group-containing
     antistatic agents containing quaternary ammonium salt groups,
ethylene
     glycol chains, C≥4 hydrocarbon groups, and polymerizable
     groups, and (C) silicone compds.
     165182-57-0P
IT
        (antistatic coating materials for recording media)
RN
     165182-57-0 HCAPLUS
CN
     2-Propenoic acid, 2-methyl-, 3-(dihydroxymethylsilyl)propyl
ester,
     polymer with dimethylsilanediol, \alpha, \alpha'-[[[(4-
     ethenylphenyl) methyl] octadecyliminio] di-2,1-ethanediyl] bis [\omega-
     hydroxypoly(oxy-1,2-ethanediyl)] dichloride, \alpha-hydro-\omega-
     [(1-oxo-2-propenyl)oxy]poly(oxy-1,2-ethanediyl) ether with
     2-ethyl-2-(hydroxymethyl)-1,3-propanediol (3:1),
methylsilanediol,
     oxirane and \alpha-(1-oxo-2-propenyl)-\omega-[(1-oxo-2-
     propenyl)oxy]poly(oxy-1,2-ethanediyl), graft (9CI) (CA INDEX
     NAME)
     CM
          1
     CRN
          159969-22-9
     CMF
          (C2 H4 O)n (C2 H4 O)n C31 H56 N O2 . Cl
     CCI
          PMS
```

HO 
$$= \begin{bmatrix} CH_2 - CH_2 - O & CH_2 - CH_2 \\ Me - (CH_2)_{17} - N^{+} & CH_2 \\ HO = \begin{bmatrix} CH_2 - CH_2 - O & CH_2 - CH_2 \\ CH_2 - CH_2 - O & CH_2 \end{bmatrix}$$
 CH  $= CH_2$ 

• cl -

CM 2

CRN 156787-79-0 CMF C8 H16 O4 Si

$$\begin{array}{c|c} \text{OH} & \text{O} & \text{CH}_2 \\ & | & | & || & || \\ \text{Me-Si-} & (\text{CH}_2)_3 - \text{O-C-C-Me} \\ & | & \\ & \text{OH} \end{array}$$

CM 3

CRN 43641-90-3 CMF C H6 O2 Si

$$\begin{array}{c} \text{OH} \\ | \\ \text{HO-- SiH-- CH}_3 \end{array}$$

CM 4

CRN 28961-43-5 CMF (C2 H4 O)n (C2 H4 O)n (C2 H4 O)n C15 H20 O6

USHA SHRESTHA EIC 1700 REM 4B28

CCI PMS

## PAGE 1-A

$$H_2C = CH - C - O - CH_2 - CH_2 - O - CH_2 - CH_2$$

## PAGE 1-B

$$-CH_{2} \xrightarrow{0} O C - CH = CH_{2}$$

CM 5

CRN 26570-48-9

CMF (C2 H4 O)n C6 H6 O3

CCI PMS

$$H_2C = CH - C - CH_2 - CH_2$$

CM 6

CRN 1066-42-8 CMF C2 H8 O2 Si

CRN 75-21-8 CMF C2 H4 O



IT 201419-38-7DP, trrimethylsilyl-terminated (polymerizable silicone compds. of antistatic coating materials)

RN 201419-38-7 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 3-(dihydroxymethylsilyl)propyl ester,

polymer with dimethylsilanediol, methylsilanediol and oxirane,
graft (9CI) (CA INDEX NAME)

CM 1

CRN 156787-79-0 CMF C8 H16 O4 Si

$$\begin{array}{c|c} \text{OH} & \text{O } \text{CH}_2 \\ \mid & \mid \mid & \mid \\ \text{Me-Si-} (\text{CH}_2)_3 - \text{O-C-C-Me} \\ \mid & \mid \\ \text{OH} \end{array}$$

CM 2

CRN 43641-90-3 CMF C H6 O2 Si

CRN 1066-42-8 CMF C2 H8 O2 Si

$$\begin{array}{c} \text{OH} \\ | \\ \text{H}_3\text{C-}\sin\text{-}\text{CH}_3 \\ | \\ \text{OH} \end{array}$$

CM 4

CRN 75-21-8 CMF C2 H4 O



IC ICM C09K003-16

ICS C09K003-16; G11B007-24

CC 74-12 (Radiation Chemistry, **Photochemistry**, and **Photographic** and Other Reprographic Processes)
Section cross-reference(s): 42, 77

ST antistatic coating material recording media

IT Coating materials

(antistatic, antistatic coating materials for recording media)

IT Memory devices

(magnetooptical disks, antistatic coating materials for recording media)

IT Memory devices

(optical disks, read-only, antistatic coating materials for recording media)

IT Coating materials (photocurable, scratch-resistant, antistatic coating materials for **recording** media) 165182-56-9P **165182-57-0P** 165182-58-1P IT (antistatic coating materials for recording media) 201419-38-7DP, trrimethylsilyl-terminated IT (polymerizable silicone compds. of antistatic coating materials) L37 ANSWER 32 OF 38 HCAPLUS COPYRIGHT 2005 ACS on STN ACCESSION NUMBER: 1995:621508 HCAPLUS DOCUMENT NUMBER: 123:22083 TITLE: Method and apparatus for forming electrophotographic color transferred image Kato, Eiichi; Osawa, Sadao; Nakazawa, Yusuke INVENTOR(S): Fuji Photo Film Co., Ltd., Japan PATENT ASSIGNEE(S): PCT Int. Appl., 108 pp. SOURCE: CODEN: PIXXD2 DOCUMENT TYPE: Patent English LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION: PATENT NO. KIND DATE APPLICATION NO. DATE -------------------WO 9423345 A1 19941013 WO 1994-JP487 1994 0325 W: JP, US RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE JP 06337599 A2 19941206 JP 1993-349754 1993 1228 A1 19950503 EP 1994-910540 EP 651295

1994

0325

EP 651295 B1 19980610

R: DE, GB

US 5747214 Α US 1994-343476 19980505 1994 1125 PRIORITY APPLN. INFO.: JP 1993-90488 Α 1993 0326 JP 1993-93832 Α 1993 0330 WO 1994-JP487 W 1994 0325 On the surface of an electrophotog. photosensitive element, a AB compound containing fluorine atoms and/or silicon atoms is provided in order to form a peelable transfer layer on the photosensitive element, a toner image of ≥1 colors is formed on the transfer layer by electrophotog, process, and then the toner image is transferred to a transfer material together with the transfer layer. A color copy of high-definition and high quality can be easily and stably obtained without any color misregistration, and a color image with stable preservability can be formed. IC ICM G03G013-16 ICS G03G015-16 CC 74-3 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes) Rubber, silicone, uses IT Siloxanes and Silicones, uses (transfer layer for electrophotog. photoreceptor) IT Siloxanes and Silicones, uses (aminoalkyl di-Me, KF 804; transfer layer for electrophotog. photoreceptor) IT Siloxanes and Silicones, uses (carboxy-containing, X-22-3701E; transfer layer for electrophotog.

```
photoreceptor)
IT
     Siloxanes and Silicones, uses
        (di-Me, transfer layer for electrophotog.
        photoreceptor)
     Polyoxyalkylenes, uses
TT
        (di-Me siloxane-, transfer layer
        for electrophotog. photoreceptor)
     Siloxanes and Silicones, uses
IT
        (di-Me, 3-hydroxypropyl Me, ethoxylated,
        transfer layer for electrophotog. photoreceptor)
IT
     Siloxanes and Silicones, uses
        (di-Me, [(methylsilylidyne)tris(oxy)]tris-,
        hydroxy-terminated, ethers with polyethylene-
        polypropylene glycol monoalkyl ether,
        transfer layer for electrophotog. photoreceptor)
     Siloxanes and Silicones, uses
IT
        (di-Me, carboxy-terminated, TSF 4770; TSF
        411; transfer layer for electrophotog. photoreceptor)
     Siloxanes and Silicones, uses
IT
        (di-Me, epoxy-containing, XF42-A5041; transfer
        layer for electrophotog. photoreceptor)
     Siloxanes and Silicones, uses
IT
        (di-Me, mercaptopropyl group-terminated,
        transfer layer for electrophotog. photoreceptor)
IT
     Siloxanes and Silicones, uses
        (di-Me, polyoxyalkylene-,
        transfer layer for electrophotog. photoreceptor)
IT
     Polyoxyalkylenes, uses
        (fluorine-containing, transfer layer for electrophotog.
        photoreceptor)
IT
     Siloxanes and Silicones, uses
       (hydroxy-terminated, transfer layer for electrophotog.
        photoreceptor)
IT
     Fluoropolymers
       Siloxanes and Silicones, uses
        (polyoxyalkylene-, transfer layer for electrophotog.
        photoreceptor)
IT
    Polyoxyalkylenes, uses
        (siloxane-, transfer layer for electrophotog.
        photoreceptor)
    75-21-8D, Oxirane, reaction products with siloxanes
IT
     82030-84-0, SURFLONS141 91105-71-4, SURFLONS-382
                                                          144070-79-1
                  163916-21-0 163916-22-1
     163916-20-9
                                               163916-23-2
     163916-24-3 163916-27-6 163916-28-7 163916-29-8
     164104-57-8
                  173611-09-1
        (transfer layer for electrophotog. photoreceptor)
```

L37 ANSWER 33 OF 38 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER:

1995:248292 HCAPLUS

DOCUMENT NUMBER:

122:20401

TITLE:

Magnetic particles used for

electrophotographic and electrostatic recording, and manufacture thereof

INVENTOR(S):

Shiozaki, Masaya; Kikuta, Shinji; Edahiro,

Kazuhisa

PATENT ASSIGNEE(S):

Mita Industrial Co Ltd, Japan Jpn. Kokai Tokkyo Koho, 11 pp.

CODEN: JKXXAF

DOCUMENT TYPE:

Patent

LANGUAGE:

SOURCE:

Japanese

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

DATE	PATENT NO.	KIND	DATE	APPLICATION NO.
i	JP 06102708	A2	19940415	JP 1992-253138
1992				
0922 PRIO	JP 3216916 RITY APPLN. INFO.:	B2	20011009	JP 1992-253138

1992

0922

AB The title magnetic particles comprise magnetic powder whose surface is bonded with a polymer via a coupling agent. The manufacture

comprises processing the powder with the coupling agent to introduce a functional group on the surface, attaching a polymerization

initiator to the functional group, and polymerizing a vinyl monomer in

a dispersed medium containing the particles. The magnetic particles

exhibited excellent dispersibility and affinity with a binder resin.

IT 159654-95-2P

(magnetic particles bonded with polymers)

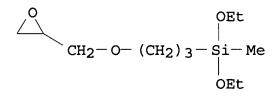
RN 159654-95-2 HCAPLUS

CN · 2-Propenoic acid, 2-methyl-, butyl ester, polymer with diethenylbenzene,

diethoxymethyl[3-(oxiranylmethoxy)propyl]silane, ethenylbenzene and 2,2'-oxybis[ethanol] (9CI) (CA INDEX NAME)

CM 1

CRN 2897-60-1 CMF C11 H24 O4 Si



CM 2

CRN 1321-74-0 CMF C10 H10 CCI IDS



$$2 \left\lceil D1 - CH = CH_2 \right\rceil$$

CM 3

CRN 111-46-6 CMF C4 H10 O3

$${\tt HO-CH_2-CH_2-O-CH_2-CH_2-OH}$$

CRN 100-42-5 CMF C8 H8

 $H_2C = CH - Ph$ 

CM 5

CRN 97-88-1 CMF C8 H14 O2

 $\begin{array}{c|c} \text{O} & \text{CH}_2 \\ \parallel & \parallel \\ \text{n-BuO-} & \text{C-} & \text{C-} & \text{Me} \end{array}$ 

IC ICM G03G009-107

ICS C08F002-00; C08F002-18; C08F002-44; C08F004-02; G03G009-083

CC 74-3 (Radiation Chemistry, **Photochemistry**, and **Photographic** and Other Reprographic Processes)
Section cross-reference(s): 38

ST magnetic particle electrophotog; electrostatic **recording** magnetic particle

IT Recording

(elec., magnetic particles bonded with polymers)

IT 159654-94-1P **159654-95-2P** 159654-96-3P (magnetic particles bonded with polymers)

L37 ANSWER 34 OF 38 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 19

1995:192032 HCAPLUS

DOCUMENT NUMBER:

122:20587

TITLE:

SOURCE:

Thermal transfer dye-donating material

INVENTOR(S):

Kubodera, Seiichi

PATENT ASSIGNEE(S):

Fuji Photo Film Co Ltd, Japan Jpn. Kokai Tokkyo Koho, 31 pp.

CODEN: JKXXAF

DOCUMENT TYPE:

Patent Japanese

LANGUAGE:

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.

KIND DATE

APPLICATION NO.

DATE

```
A2
                                19940412 JP 1992-276834
     JP 06099667
1992
0922
PRIORITY APPLN. INFO.:
                                           JP 1992-276834
1992
0922
     The title material is obtained by coating and drying on a support
AB
     a dye-donating layer composition containing a thermal migration
type dye, a
     binder resin, a mold releasing agent, and a F-containing
compound in an
     organic solvent of b.p. 100-170°. The thermal transfer
     dye-donating material can give stable images with high-d. and
     sharpness.
     ICM B41M005-30
IC
CC
     74-7 (Radiation Chemistry, Photochemistry, and
     Photographic and Other Reprographic Processes)
     Section cross-reference(s): 42
IT
     Siloxanes and Silicones, uses
        (amino, as mold releasing agent contained in thermal transfer
        dye-donating type material)
IT
     Polyoxyalkylenes, uses
        (di-Me siloxane-, as mold
        releasing agent contained in thermal transfer dye-donating
type
        material)
IT
     Siloxanes and Silicones, uses
        (di-Me, hydroxypropyl Me, ethers with
        polyethylene-polypropylene glycol
        mono-Pr ether, [(trimethylsilyl)oxy]-terminated; as mold
        releasing agent contained in thermal transfer dye-donating
type
        material)
IT
     Siloxanes and Silicones, uses
        (di-Me, polyoxyalkylene-, as mold
        releasing agent contained in thermal transfer dye-donating
type
        material)
IT
     Siloxanes and Silicones, uses
        (epoxy, as mold releasing agent contained in thermal transfer
```

dye-donating type material)

IT Epoxy resins, uses

(siloxane-, as mold releasing agent contained in thermal transfer dye-donating type material)

L37 ANSWER 35 OF 38 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER:

1994:545411 HCAPLUS

DOCUMENT NUMBER:

121:145411

TITLE:

Thermal transfer recording material

INVENTOR(S):

Tanaka, Kazuyoshi; Hashimoto, Yutaka; Kamei,

Masayuki

PATENT ASSIGNEE(S):

Dainippon Ink & Chemicals, Japan

SOURCE:

Jpn. Kokai Tokkyo Koho, 16 pp.

CODEN: JKXXAF

DOCUMENT TYPE:

Patent

LANGUAGE:

Japanese

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

DATE	PATENT NO.	KIND	DATE	APPLICATION NO.
		7.0	10020727	TD 1000 4025
	JP 05185757	A2	19930727	JP 1992-4835

1992

0114

JP 3209281 B2 20010917

PRIORITY APPLN. INFO.:

JP 1992-4835

1992

0114

AB In the title material consisting of a base film, an ink layer on 1 side of the base film, and a synthetic resin layer on the other side, the above resin layer contains a resin containing fluorinated-alkyl and polyorganosiloxy groups and, optionally, in addition, polyoxyalkylene or polyoxyalkylene and alkyl groups.

The

above resin consists of a polymer obtained from a
 fluorinated-alkyl group-containing ethylenic monomer and a
 polyorgnosiloxy group-containing ethylenic monomer and,
optionally, in

addition, a polyoxyalkylene group-containing ethylenic monomer and

alkylene group-containing ethylenic monomer. The material treated

with the above resin has anti-sticking characteristics and provides high-resolution and high-quality printings at high speed printing.

IT 157382-57-5

(treatment agent containing, thermal printing material treated)

RN 157382-57-5 HCAPLUS

CN 2-Propenoic acid, dodecyl ester, polymer with  $\alpha$ -[dimethyl[3-

[(2-methyl-1-oxo-2-propenyl)oxy]propyl]silyl]- $\omega$ -

[(trimethylsilyl)oxy]poly[oxy(dimethylsilylene)],

 $\alpha$ -(ethenyldimethylsilyl)- $\omega$ -

[(ethenyldimethylsilyl)oxy]poly[oxy(dimethylsilylene)],

3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptadecafluorodecyl

2-propenoate and methyloxirane polymer with oxirane

2-[(1-oxo-2-propenyl)oxy]ethyl ester (9CI) (CA INDEX NAME)

CM 1

CRN 123109-42-2

CMF (C2 H6 O Si)n C12 H26 O3 Si2

CCI PMS

CM 2

CRN 59942-04-0

CMF (C2 H6 O Si)n C8 H18 O Si2

CCI PMS

CRN 27905-45-9 CMF C13 H7 F17 O2

$$\begin{array}{c} \text{O} \\ || \\ \text{F}_3\text{C---} (\text{CF}_2)_7 - \text{CH}_2 - \text{CH}_2 - \text{O---} \text{C---} \text{CH} = \text{CH}_2 \end{array}$$

CM 4

CRN 2156-97-0 CMF C15 H28 O2

$$\begin{array}{c} \text{O} \\ || \\ \text{Me- (CH}_2)_{\,11} - \text{O- C- CH- CH}_2 \end{array}$$

CM 5

CRN 157184-95-7

CMF C5 H8 O3 . x (C3 H6 O . C2 H4 O)x

CM 6

CRN 818-61-1 CMF C5 H8 O3

$$\begin{array}{c} \mathsf{O} \\ || \\ \mathsf{HO-CH}_2\mathsf{-CH}_2\mathsf{-O-C-CH} \end{array} \\ \mathsf{CH}_2$$

CM 7

CRN 9003-11-6

·CMF (C3 H6 O . C2 H4 O) $\mathbf{x}$ 

CCI PMS

CM . 8

CRN 75-56-9 CMF 'C3 H6 O

CH<sub>3</sub>

CM

CRN 75-21-8 C2 H4 O CMF

IC ICM B41M005-40

CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

IT 156932-33-1 156932-35-3 156932-36-4 156932-38-6 156932-40-0 156932-44-4 156932-45-5 156932-47-7

157177-62-3 **157382-57-5** 156932-48-8

(treatment agent containing, thermal printing material treated)

L37 ANSWER 36 OF 38 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER:

1994:422385 HCAPLUS

DOCUMENT NUMBER:

121:22385

TITLE:

Ternary surfactant system to reduce static

charges in silver halide photographic

material

INVENTOR(S):

PATENT ASSIGNEE(S):

SOURCE:

Schoenberg, Allan R.; Shu, Ming Tsai

du Pont de Nemours, E. I., and Co., USA

U.S., 8 pp. Cont. of U.S. Ser. No. 627,872,

abandoned.

CODEN: USXXAM

DOCUMENT TYPE:

LANGUAGE:

Patent

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

DATE	PATENT NO.	KIND	DATE	APPLICATION NO.	
	 US 5258276	 А	19931102	US 1992-885063	
1992	!				
0515 PRIC	RITY APPLN. INFO.:			US 1987-129805	B1
1987	,				
1207	,				
				US 1990-511801	B1
1990					
0416	;				
				US 1990-627872	B1
1990				-	
1213					
AB a	A ternary surfactan	t syste	em useful in	reducing the propens	sity of
	<del>-</del>	g. mate	erial to gene	erate unwanted statio	2
char	is described. This	ternar	ry system co	mprises a mixture of	a
spec	ific anionic and two spe	cific r	nonionic sur	factants and produces ution of this ternary	3 a
syst	em is				
	also useful in redu an x-ray intensifyi			s produced on the sur	fface of
IC NCL	ICM G03C001-85 430527000	_			
CC	74-2 (Radiation Che	_		<del>-</del>	
IT	Photographic and Ot Siloxanes and Silic (ternary surfact	ones, p	roperties	rocesses) ning, for reducing st	atio
_1	(cernary surract	ant sys	ocems contain	iring, for reducting st	acic

in silver halide photog. materials)

charges

Siloxanes and Silicones, uses IT

(di-Me, 3-hydroxypropyl Me, ethers with

polyethylene-polypropylene glycol mono-Me ether, with polyethylene-

polypropylene glycol mono-Me ether, ternary

surfactant systems containing Silwet L 77, for reducing static charges in silver halide photog. materials)

Siloxanes and Silicones, uses IT

(di-Me, 3-hydroxypropyl Me, ethoxylated

propoxylated, ternary surfactant systems containing ABIL B 8843,

for reducing static charges in silver halide photog. materials)

Polyoxyalkylenes, uses

(di-Me, Me hydrogen siloxane-,

ternary surfactant systems containing Dow Corning 193, for reducina

static charges in silver halide photog. materials)

Siloxanes and Silicones, uses IT

(di-Me, Me hydrogen,

polyoxyalkylene-, ternary surfactant systems containing Dow Corning 193, for reducing static charges in silver halide photoq. materials)

IT Siloxanes and Silicones, uses

(polyether-, ternary surfactant systems containing, for reducina

static charges in silver halide photog. materials)

L37 ANSWER 37 OF 38 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER:

PATENT ASSIGNEE(S):

1990:506510 HCAPLUS

DOCUMENT NUMBER:

113:106510

TITLE:

Receptor sheet for sublimation-type thermal

transfer recording

INVENTOR(S):

Ichii, Masaru; Fukuda, Kozo; Komine, Tsutomu

Nisshinbo Industries, Inc., Japan

SOURCE:

Jpn. Kokai Tokkyo Koho, 6 pp.

CODEN: JKXXAF

DOCUMENT TYPE:

Patent Japanese

LANGUAGE:

FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

PATENT NO. DATE APPLICATION NO. KIND DATE

JP 01232096 A2 19890918 JP 1988-58344 1988

0314

PRIORITY APPLN. INFO.:

JP 1988-58344

1988

0314

AB In obtaining the title receptor sheet by forming a dye-receiving layer with a water-based binder, the above layer is formed with a mixed solution containing a water-based saturated polyester resin, an

associate-type thickener, and a (mold) release agent. The associate-type thickener is a nonionic-type thickener and the release

agent is selected from amino-modified silicones and silane derivs.

and reaction products of amine-reactive compds.

IT 101638-90-8

(thermal-transfer printing receptor sheets containing)

RN 101638-90-8 HCAPLUS

CN Silane, diethoxymethyl[3-(oxiranylmethoxy)propyl]-, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 2897-60-1 CMF C11 H24 O4 Si

IC ICM B41M005-26

ICS D21H001-28; D21H005-00

CC 74-12 (Radiation Chemistry, **Photochemistry**, and **Photographic** and Other Reprographic Processes)

ST thermal transfer receptor sheet; recording thermal transfer receptor sheet; copying thermal transfer receptor sheet

IT 3069-29-2 **101638-90-8** 101962-84-9, Borchigel-L-75 128004-35-3, QR 1001

## (thermal-transfer printing receptor sheets containing)

L37 ANSWER 38 OF 38 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER:

1978:24332 HCAPLUS

DOCUMENT NUMBER:

88:24332

TITLE:

Stabilization of chromium dioxide magnetic

pigments

INVENTOR(S):

Schoenafinger, Eduard; Motz, Herbert; Ohlinger, Manfred; Deigner, Paul; Grau,

Werner

PATENT ASSIGNEE(S):

BASF A.-G., Fed. Rep. Ger.

SOURCE:

Ger. Offen., 17 pp.

CODEN: GWXXBX

DOCUMENT TYPE:

Patent

LANGUAGE:

German

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

DATE	PATENT NO.	KIND'	DATE	APPLICATION NO.
DATE				
	DE 2617809	A1	19771103	DE 1976-2617809
1976				
0423	DE 2617809 US 4275114	C2 A	19840920 19810623	US 1977-776224
1977				
0310	JP 52130306	A2	19771101	JP 1977-44183
1977				•
0419	JP 60019566 NL 7704316	B4 A	19850516 19771025	NL 1977-4316
1977				
0420	NL 185019 NL 185019 BE 853856	B C A1	19890801 19900102 19771024	BE 1977-176926

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1977
0422
                        A1 19771125 FR 1977-12227
     FR 2349629
1977
0422
                       B1
     FR 2349629
                                19830107
                         Α
                                19800730 GB 1977-16796
     GB 1572359
1977
0422
PRIORITY APPLN. INFO.:
                                          DE 1976-2617809
                                                               Α
1976
0423
AB
     CrO2 pigments are stabilized against loss of magnetic properties
     by treatment in aqueous or alc. suspension with
    polyoxyalkylene-siloxane block polymers and drying at
     50-200°. Thus, 40 parts CrO2 in 110 parts H2O is stirred
     with 4.8 parts polyethylene-polypropylene
     glycol-dimethyl siloxane ether 2 h at 40°
     and pH 3.6-3.9, filtered, and dried 8 h at 90°. Magnetic
     tape containing this CrO2 has orientation factor 3.22 and time at
     65° and 95% relative humidity for loss of 10% magnetic
     saturation 18.0 day, compared with 2.67 and 6.3, resp., for
untreated
    CrO2.
IC
    C04B035-12
     42-5 (Coatings, Inks, and Related Products)
CC
     Section cross-reference(s): 77
     chromium dioxide magnetic stabilization; pigment magnetic
ST
     stabilization; siloxane stabilizer magnetic pigment;
    polyoxyalkylene stabilizer magnetic pigment
IT
    Pigments
        (magnetic, stabilization of, with polyoxyalkylated
        siloxanes)
IT
    Recording apparatus
        (magnetic tape, chromium dioxide magnetic pigments for,
        stabilization of)
IT
    Siloxanes and Silicones, uses and miscellaneous
        (polyoxyalkylated, stabilization by, of chromium dioxide
```

magnetic pigments)

- IT 12018-01-8
  - (pigments, magnetic stabilization of, by polyoxyalkylated siloxanes)
- IT 9003-11-6D, ethers with siloxanes 25322-68-3D, ethers with siloxanes 25322-69-4D, ethers with siloxanes

(stabilization by, of chromium dioxide magnetic pigment)